Duke Energy®

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August 15, 2006

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC (Duke)
Catawba Nuclear Station, Units 1 and 2
Docket Numbers 50-413 and 50-414
Inservice Testing (IST) Program for Pumps and Valves - Third Ten-Year Interval Plan

Pursuant to 10 CFR 50.55a(f)(5)(i), please find attached Revision 27 of the Catawba IST Program. The three following attachments are provided in conjunction with this revision:

1. Instructions for insertion of Revision 27
2. Summary of changes
3. Catawba ASME IST Program Revision 27

Note that this submittal includes Relief Request Number CN-SRP-CA-01, concerning Auxiliary Feedwater System pump suction pressure analog gauges. Duke requests that the NRC review and approve this relief request at your earliest convenience.

There are no regulatory commitments contained in this letter or its attachment.

If you have any questions concerning this material, please call L.J. Rudy at (803) 831-3084.

Very truly yours,

D.M. Jamil

Attachment

A047

xc (with attachment):

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

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ATTACHMENT 1

Remove and discard entire contents from In-service Testing Program Manual. Tabbed dividers will be re-used. Place new sections behind appropriate tab.

ATTACHMENT 2

Detailed Description of Changes to
CNS IST Program

DETAILED DESCRIPTION OF CHANGES

Catawba Nuclear Station
Unit 1 and Unit 2

Changes for Catawba Unit 1 and Unit 2 are listed on pages 1 through 4. The new revision number (27) applies to both units. The effective date for the changes as provided by this submittal is August 19, 2005. This revision updates the program to adopt the ASME OM Code – 1998, through the OMb-2000 Addenda.

ABBREVIATION CHANGES - All codes have been reviewed to align with recommendations in publication "Guidelines for Inservice Testing at Nuclear Power Plants, NUREG 1482, Rev. 1"

IN-SERVICE TESTING PROGRAM DOCUMENT – Revision 4 added

JUSTIFICATION FOR DEFERRAL – REVISIONS

JFD Number	Valve Number(s)	Change
CN-CA-01	1(2)CA0037,1(2)CA0041,1(2)CA0045, 1(2)CA0049,1(2)CA0053,1(2)CA0057, 1(2)CA0061,1(2)CA0065	Deleted – Included in Condition Monitoring Program
CN-CA-03	1(2)CA0008,1(2)CA0010,1(2)CA012	Deleted – Included in Condition Monitoring Program
CN-CA-04	1(2)CA0173	Deleted – Included in Condition Monitoring Program
CN-CA-06	1(2)CA0291,1(2)CA0292	Deleted – Included in Condition Monitoring Program
CN-CF-02	1(2)CF0031,1(2)CF0040,1(2)CF0049, 1(2)CF0058	Deleted – Included in Condition Monitoring Program
CN-CF-03	2CF0166,2CF0167,2CF0168,2CF0169	Deleted – Included in Condition Monitoring Program
CN-FW-01	1(2)FW0028,1(2)FW0056	Deleted – Included in Condition Monitoring Program
CN-FW-02	1(2)FW0005	Deleted – Included in Condition Monitoring Program
CN-IA-01	1(2)IACV5340,1(2)IACV5350, 1(2)IACV5360,1(2)IACV5370, 1(2)IACV5380,1(2)IACV5390,	Deleted – Included in Condition Monitoring Program
CN-KC-03	1(2)KC0047,1(2)KC0279,1(2)KC0340	Deleted – Included in Condition Monitoring Program
CN-KD-01	1(2)KD0006,1(2)KD0021	Deleted – Moved to Supplemental Program (skid mounted)
CN-NB-01	1(2)NB0262	Deleted – Included in Condition Monitoring Program
CN-NC-01	1(2)NC0057	Deleted – Included in Condition Monitoring Program
CN-ND-03	1(2)ND0010,1(2)ND0044	Deleted – Included in Condition Monitoring Program
CN-NF-01	1(2)NF0229,1(2)NF0235	Deleted – Included in Condition Monitoring Program
CN-NI-02	1(2)NI0012	Deleted – Included in Condition Monitoring Program
CN-NI-03	1(2)NI0015,1(2)NI0017,1(2)NI0019, 1(2)NI0021,1(2)NI0351,1(2)NI0352, 1(2)NI0353,1(2)NI0354	Deleted – Included in Condition Monitoring Program
CN-NI-04	1(2)NI0060,1(2)NI0071,1(2)NI0082, 1(2)NI0094	Deleted – Included in Condition Monitoring Program
CN-NI-05	1(2)NI0048,1(2)NI0471,1(2)NI0485	Deleted – Included in Condition Monitoring Program
CN-NI-06	1(2)NI0059,1(2)NI0070,1(2)NI0081, 1(2)NI0093	Deleted – Included in Condition Monitoring Program
CN-NI-07	1(2)NI0101	Deleted – Included in Condition Monitoring Program
CN-NI-10	1(2)NI0116,1(2)NI0148	Deleted – Included in Condition Monitoring Program
CN-NI-11	1(2)NI0124,1(2)NI0126,1(2)NI0128, 1(2)NI0134,1(2)NI0156,1(2)NI0157, 1(2)NI0159,1(2)NI0160	Deleted – Included in Condition Monitoring Program
CN-NI-13	1(2)NI0165,1(2)NI0167,1(2)NI0169, 1(2)NI0171	Deleted – Included in Condition Monitoring Program
CN-NI-14	1(2)NI0175,1(2)N0I176,1(2)NI0180, 1(2)NI0181	Deleted – Included in Condition Monitoring Program
CN-NI-20	1(2)NI0342	Deleted – Included in Condition Monitoring Program

DETAILED DESCRIPTION OF CHANGES

Catawba Nuclear Station
Unit 1 and Unit 2

CN-NM-01	1(2)NM0424,1(2)NM0425	Deleted – Included in Condition Monitoring Program
CN-NS-01	1(2)NS0004,1(2)NS0021,1(2)NS0098, 1(2)NS0099	Deleted – Included in Condition Monitoring Program
CN-NS-02	1(2)NS0013,1(2)NS0016,1(2)NS0030, 1(2)NS0033,1(23)NS0041,1(2)NS0046	Deleted – Included in Condition Monitoring Program
CN-NV-05	1(2)NV0254	Deleted – Included in Condition Monitoring Program
CN-NV-06	1(2)NV0270,1(2)NV0290	Deleted – Included in Condition Monitoring Program
CN-NV-08	1(2)NV0813	Deleted – Included in Condition Monitoring Program
CN-NV-09	1(2)NV0090,1(2)NV0874	Deleted – Included in Condition Monitoring Program
CN-NV-12	1(2)NV0001A,1(2)NV0002A	Deleted – Moved to Supplemental Program
CN-NW-01	1(2)NW0006,1(2)NW0063	Deleted – Included in Condition Monitoring Program
CN-NW-02	1(2)NW0017,1(2)NW0021,1(2)NW0024, 1(2)NW0027,1(2)NW0037,1(2)NW0040, 1(2)NW0043,1(2)NW0047,1(2)NW0050, 1(2)NW0070,1(2)NW0074,1(2)NW0077, 1(2)NW0080,1(2)NW0086,(2)NW0089, 1(2)NW0092,1(2)NW0095,1(2)NW0098, 1(2)NW0101,1(2)NW0107,1(2)NW0109, 1(2)NW0111,1(2)NW0114,1(2)NW0120, 1(2)NW0121, 1(2)NW0123 through 1(2)NW0133, 1(2)NW0135,1(2)NW0136,1(2)NW0138, 1(2)NW0139,1(2)NW0140,1(2)NW0141, 1(2)NW0147,1(2)NW0148,(2)NW0159, 1(2)NW0160,1(2)NW0163,1(2)NW0164, 1(2)NW0168,1(2)NW0169,1(2)NW0171, 1(2)NW0172,1(2)NW0178,1(2)NW0179, 1(2)NW0183,1(2)NW0184,1(2)NW0188, 1(2)NW0189,1(2)NW0196,1(2)NW0197, 1(2)NW0201,1(2)NW0202,1(2)NW0205, 1(2)NW0206,1(2)NW0209,1(2)NW0210, 1(2)NW0213,1(2)NW0214,1(2)NW0218, 1(2)NW0219,1(2)NW0223,1(2)NW0224, 1(2)NW0230,1(2)NW0231,1(2)NW0240, 1(2)NW0241,1(2)NW0245,1(2)NW0246	Deleted – Included in Condition Monitoring Program
CN-RF-01	1(2)RF0392,1(2)RF0448	Deleted – Included in Condition Monitoring Program
CN-RN-01	1(2)RN0405,1(2)RN0438,1(2)RN0485	Deleted – Included in Condition Monitoring Program
CN-SA-01	1(2)SA0003,1(2)SA0006	Deleted – Included in Condition Monitoring Program
CN-VB-01	1(2)VB0085	Deleted – Included in Condition Monitoring Program
CN-VG-01	1(2)VG0015,1(2)VG0016,1(2)VG0029, 1(2)VG0030,1(2)VG0031,1(2)VG0032. 1(2)VG0059,1(2)VG0060,1(2)VG0073, 1(2)VG0074,1(2)VG0075,1(2)VG0076	Deleted – Moved to Supplemental Program (skid mounted)
CN-VG-02	1(2)VG0025,1(2)VG0026,1(2)VG0027, 1(2)VG0028,1(2)VG0069,1(2)VG0070. 1(2)VG0071,1(2)VG0072	Deleted – Moved to Supplemental Program (skid mounted)
CN-VG-03	1(2)VG0133,1(2)VG0134,1(2)VG0135 1(2)VG0136	Deleted – Moved to Supplemental Program (skid mounted)
CN-VI-01	1(2)VI0079	Deleted – Included in Condition Monitoring Program
CN-VI-03	1(2)VI0367,1(2)VI0368	Deleted – Included in Condition Monitoring Program
CN-VI-04	1(2)VI0369,1(2)VI0370	Deleted – Included in Condition Monitoring Program
CN-VS-01	1(2)VS0056	Deleted – Included in Condition Monitoring Program
CN-VY-01	1(2)VY0016	Deleted – Included in Condition Monitoring Program
CN-WL-01	1(2)WLA022,1(2)WL0321,1(2)WL0806,	Deleted – Included in Condition Monitoring Program

	1(2)WL0868	
CN-YM-01	1(2)YM0121	Deleted – Included in Condition Monitoring Program

JUSTIFICATION FOR DEFERRAL – New

JFD Number	Valves
CN-RF-02	1(2)RF389B,1(2)RF447B (Cold Shutdown Test)

PUMP SPECIFIC RELIEF REQUEST – Resubmit

CN-SRP-CA-01 Auxiliary Feedwater Pump Inservice Testing Instrumentation

PUMPS ADDED TO THE CATAWBA INSERVICE TESTING PROGRAM

System	Pumps
WL	1(2)WLATS – turbine driven aux feedwater pump sump pump (supplemental program)
WL	1(2)WLBTS – turbine driven aux feedwater pump sump pump (supplemental program)

VALVES ADDED TO THE CATAWBA INSERVICE TESTING PROGRAM

System	Valves
IAE	1(2)IACK5260,1(2)IACK5270,1(2)IACK5280,1(2)IACJK5290
	1(2)IACK5300,1(2)IACK5310,1(2)IACK5320,1(2)IACJK5330
NB	1NB0103
NV	1(2)NV0044A,1(2)NV0055A,1(2)NV0066A,1(2)NV0077A (Supplemental Program)

VALVE CHANGES TO INSERVICE TESTING PROGRAM

Valve	Change
1(2)VG0025	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0026	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0027	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0028	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0069	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0070	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0071	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0072	Skid mounted, Supplemental Program (emergency diesel)

All check valves in Condition Monitoring Program except:

Valve	Change
1(2)FD0029	Skid mounted, Supplemental Program (emergency diesel)
1(2)FD0034	Skid mounted, Supplemental Program (emergency diesel)
1(2)FD0069	Skid mounted, Supplemental Program (emergency diesel)
1(2)FD0074	Skid mounted, Supplemental Program (emergency diesel)
1(2)KD0006	Skid mounted, Supplemental Program (emergency diesel)
1(2)KD0021	Skid mounted, Supplemental Program (emergency diesel)
1(2)LD0071	Skid mounted, Supplemental Program (emergency diesel)
1(2)LD0072	Skid mounted, Supplemental Program (emergency diesel)
1(2)LD0078	Skid mounted, Supplemental Program (emergency diesel)
1(2)LD0079	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0015	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0016	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0029	Skid mounted, Supplemental Program (emergency diesel)

1(2)VG0030	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0031	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0032	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0059	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0060	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0073	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0074	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0075	Skid mounted, Supplemental Program (emergency diesel)
1(2)VG0076	Skid mounted, Supplemental Program (emergency diesel)

CHANGES TO THE PROGRAM DOCUMENT

Updated all references to OM Code-1998 (including OMb-2000 Addenda)
Added ISTA references as appropriate
Updated program period to third ten year interval
Revised section 4.3.7 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 section 4.5.1 to include discussion of 10CFR50 Appendix J, Option B
Updated Appendix A to reflect recent organization changes

ATTACHMENT 3

CNS ASME IST Program Revision 27

DUKE POWER

CATAWBA NUCLEAR STATION

ASME INSERVICE TESTING PROGRAM

REVISION 27

August 2006

Prepared by: _____ Date: 8/7/06

Reviewed by: _____ Date: 8/7/06

Approved by: _____ Date: 8/7/06

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CATAWBA NUCLEAR STATION
ASME OM Code
In-Service Testing Program Document

August 1, 2006

Revision 04

Prepared by: _____ Date: 8/7/06

Reviewed by: _____ Date: 8/7/06

Approved by: _____ Date: 8/7/06

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1.0 SCOPE OF DOCUMENT

Technical Specification requires performance of pump and valve testing in accordance with ASME OM Code. Failure to meet the requirements of this program is a violation of Technical Specifications and 10CFR 50.55a.

The purpose of this program document is to specify the Catawba Nuclear Station (or hereafter referred to as "licensee" or "CNS") In-Service Testing 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 CNS IST Program.

1.1 Program Period:

Third Ten-Year Interval (120-month period beginning August 19, 2005);
Unit(s) 1 and 2 Concurrently

1.2 Applicable ASME Code(s) and Addenda:

ASME OM-1998 Edition; including OMb Code-2000 Addenda

1.3 Program Changes:

The NRC shall be notified of IST Program changes; however, component additions and deletions will 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 source documents unless determined to be impractical. If a hardship is identified, notification will be submitted to the NRC and an interim extension from testing implementation obtained.

The content of this program document is based on recommendations stated in NUREG-1482 (Rev. 1) and is intended for the purpose of maintaining program continuity and documenting additional discussions and positions relative to code interpretations. Therefore, changes to this 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 (plus addenda)

Generic Letter 89-04

Generic Letter 89-10

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 (Rev. 1), Guidelines for In-service Testing at Nuclear Power Plants, June 2004

NRC Information Notice 97-90

NRC Information Notice 97-16

3.0 DEFINITIONS and TERMS

Generic Letter 89-10 - the NRC letter providing additional 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 CNS Technical Specifications:

1) Quarterly (3 months) - 115 days maximum
2) Cold Shutdown (CSD) - Average Coolant Temperature (T_{avg}) $\leq$ 200°F
3) 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 Code. Sections 4.1 and 5.1 of this document define the criteria to be included in the IST Program.

"App. B Component" - components (valves and pumps) tested under 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 at the end of the actuating cycle.

Limiting Stroke-Time - the 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.

Justification - For Deferrals A documented explanation of why a valve can only be tested at a cold shutdown or 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 with NRC Regulatory Guide 1.26 as ISI Class A, B, or C, which corresponds to ASME Class 1, 2, or 3 respectively, are included in the CNS 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 Code.

CNS 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 will 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 (reference NUREG-1482, rev. 1).

4.2 Valve Testing Program Exemptions and Position Statements

Valves tested under jurisdiction of this program will be tested per requirements of OM ISTC (OMb-2000), at the specified frequencies unless it has been determined to be impractical. This section of the program document provides CNS 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 Valve stroke times will be recorded to at least the nearest second, except for valves, which have stroke times of less than one second. For these valves, a time of one second will be recorded. Valves that stroke in less than 2 seconds may be exempted from reference ranges and the maximum limiting stroke time shall be 2 seconds as specified by OM ISTC-5152.

4.2.3 Stopwatches used to measure stroke times will be calibrated annually.

4.2.4 OM 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.

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).

4.2 Valve Testing Program Exemptions and Position Statements (continued)

NOTE: For cold shutdowns less than 48 hours, valve testing does not have to be performed. However, for cold shutdowns expected to exceed 48 hours, valve testing will 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 OM ISTC-3500 or are taken credit for 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 included in the IST Program. Guidance in ISTC-3540 allows a full stroke exercise frequency of 5 years. This frequency is modified by NUREG-1482, section 4.4.3.1, which limits the frequency to a maximum interval of 2 years. Active manual valves will therefore, be exercised at a frequency not to exceed 2 years.

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. CNS 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 taken credit for in the safety analysis for being capable of relieving pressure 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 guidance given in OM Code-1998, Appendix I, sections I-1300.

4.2.9 **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.

4.2.10 **Containment Hydrogen Purge Valves** (VY), which are passive in the closed direction, will be leak tested per 10 CFR 50, Appendix J but not stroke-timed for IST purposes. These valves are "passive" in Modes 1-4. CNS Technical Specification section 3.6.3 requires exercising these valves. However, power is removed and these valves are placed under administrative control as to not permit re-positioning after they have been leak-tested per Appendix J.

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 CNS positions concerning interpretations, guidance, and other options and testing alternatives for check valves.

4.3.1 For check valves in series, where one of two valves is credited in the safety analysis, the verification that the pair of valves is capable of closing will be done on the basis of testing one of the check valves.

4.3.2 Category A and A/C valves (containment and pressure isolation check valves) will be leak tested in accordance with ISTC-3600.

4.3.3 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 possible, 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-3550)

4.3.4 Seismic boundary check valves will be included in the program.

4.3.5 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.

4.3.6 Where applicable to the CNS 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.

4.3.7 As an alternative to the testing and/or examination requirements of ISTC-3510, ISTC-3520, ISTC-3540, and ISTC-5221, the licensee has developed a conditioning monitoring program for check valves. Details of the program may be found in the program document for the Catawba Check Valve Condition Monitoring (CM) Program.

4.3.8 The licensee recognizes the NRC's acceptance of non-intrusive techniques (N.I.T.) for testing check valves and will randomly apply N.I.T. to the check valve program. However, the industry's use of N.I.T. equipment is continuing to evolve and in many cases is not supplied from the vendor under the 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 an 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. Relief valves 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 need not be leakage tested. 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 shall be tested per 10CFR50, Appendix J (Option B) has been adopted 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. The actual testing interval can be determined from the Leakrate Program. Refueling is the minimum testing interval for the bulk of the Appendix J valves.

Where a valve is identified as a containment isolation valve in the Technical Specification or UFSAR and if it is determined to be an "active" valve with respect to this function, it will be exercised to both the open and closed positions.

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 shall also 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 shall 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 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 prior approval, but simply documented in the program plan. FD, KD, and most of the VG and LD system valves have been excluded from the scope of IST test requirements because they are all skid-mounted valves. They are all 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 DBDs, DBD associated TAC Sheets, Technical Specifications, or any UFSAR. Such acceptance criteria are the most limiting values and can not be exceeded. IST-TAC is set to verify operational readiness of the valves and to identify valve degradation before the 'most limiting' acceptance criteria is exceeded. IST-TAC will be evaluated to verify that other acceptance criteria specified (UFSAR, DBD, TS, etc.) will not be exceeded.

Leakage criteria for valves (other than those tested in accordance with 10CFR50, Appendix J, Technical Specification, or system specific criteria), will be determined based on leakage rates specified by the licensee or using the guidance provided in ISTC-3630.

Relief valve IST-TAC will be established per Appendix I, or developed using licensee calculations as permitted by the 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. The 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 <u>shall</u> be immediately stroked again to achieve an acceptable stroke time. Per the Catawba 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 <u>may</u> 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 <u>or</u> 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 stoke-time is acceptable, a third test may be performed to verify consistent behavior. Documentation of the third test will be optional if it shows <u>no</u> deviation from the second stroke.

4.10.2 Valve Stroke-Time Measurements and Methods:

Valve stroke-times are measured with a stopwatch to the nearest second. The stopwatch is started when the valve is actuated and it is stopped when an indication light is received indicating that the valve has completed its full stroke. OAC measurement is also an acceptable means of valve stroke timing.

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):

Valve Type	Limiting Value Calculation
EMO (> 10secs.)	1.3R (to the nearest 0 or 5sec.)
EMO (≤ 10secs.)	1.5R (to the nearest 0 or 5sec.)
POV (> 10secs.)	2.0R (to the nearest 0 or 5sec.)
POV (≤ 10secs.)	2.25R (to the nearest 0 or 5sec.)

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 the reactor to a 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 UFSAR Chapter 15).

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 CNS 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 Catawba 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 prior 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 any UFSAR. IST-TAC is 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.

5.8 Pump Group Classification

ASME OM-1998 requires pumps be defined as Group A or Group B, which in turn defines the test type and frequency. ISTB-2000, Supplemental Definitions, provides the characteristics for identifying both group A and B pumps. ISTB 3400, Frequency of Inservice Tests and ISTB-5120, Insevice Testing, provides the testing requirements for both groups.

Given the definition for Group A and B pumps, CNS pumps will be broken down as follows;

Group A	Group B
KC	CA
ND	NI
NV	NS
RN	SMP
YC	

5.9 Pump Design

The ASME OM-1998 ISTB Code imposes different requirements depending on the pump design. There three basic designs: centrifugal or CP, positive displacement or PDP, and vertical line shaft or VLS. The VLS pumps at CNS are the Nuclear Service Water pumps. The PDP pumps at CNS are the Standby Make-up pumps. The remaining pumps are CP pumps. Code tables ISTB-5100-1, 5200-1, 5300-1, and 5300-2 provide the testing parameters and ranges based on pump design.

5.10 Standby Make-up Pumps

The standby make-up pumps or SSF pumps are part of the IST program. These are non-safety, non code pumps and are therefore not subject to the full extent of code testing. They are important for mitigating loss of control room events, SBO, etc. (non Design Basis events) and will be tested accordingly. The extent of testing will be flow and discharge pressure only.

6.0 Relief Requests

The purpose of a Relief Request is to request the NRC grant relief from those requirements of the existing Code that cannot be followed. NRC review and approval of the alternative testing is required. 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 Requests 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 Request is submitted for those requirements which have been determined to be clearly impractical, the licensee reserves the right to implement the proposed alternative testing while the NRC is reviewing the Relief Request, providing the licensee has assured the alternative does not compromise the level of safety provided by the code testing requirement. This position is referenced from NUREG-1482, section 2.5.

7.0 Justifications for Deferrals:

Justification for Deferrals (JFDs) will be written when a component can not be tested at the specified 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 outages 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 testing Justification for Deferral form is to document the reason that 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, or that 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, ISTC, 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 Coordinator will provide support for internal and external IST Program audits.

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

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

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

Appendix A: IST PROGRAM Responsibilities (Continued)

2.0 Three-Site IST Coordinator – Continued

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 technical assistance for developing test procedures,
- 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 Condition Monitoring program,
- provide input when evaluating specific component issues (why failed test, baseline changed, etc.,)

4.0 Operations Performance Test Group (OTG) and Operations Shift (OPS)

This group is responsible for the following:

- input data into procedure and IST database,
- 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: 10CFR50, Appendix B, Supplemental Program Guidance Document

1.0 Scope

The Appendix B Program establishes the 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 tests 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 perquisites 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 10CFR50, App. B).

Deviations from "guidelines" will be documented in 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 the ASME OM Code.

- pumps and valves not included in the IST Program, which are active in certain non-Design Basis Events,
- are cold shutdown valves not associated with a UFSAR Chapter 15 event,
- are significant to plant safety,
- or are of economic importance.

3.0 Program Elements

Pump and Valve Selection - This task involves identifying all components that fall within the scope of 10CFR50, Appendix B scope.

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

Demonstrate Operability – Perform baseline 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

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
- 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

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 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 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 operation conditions: the operating conditions during reactor startup, operation at power, hot standby, and reactor shutdown conditions. (note: test conditions 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 know to be operating correctly.

6.0 Appendix B Program Positions/Exceptions

6.1 The CNS 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 Catawba's GL 89-04 response, 10 CFR50 Appendix B manual valves are only stroked at a refueling outage.

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 CNS 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 Test Acceptance Criteria (TAC).

9.0 ENCLOSURES:

Enclosure 9.1 - REVISING THE PROGRAM

1. Process for Revising the IST Program

   Plant Engineering Procedure No. 3.14, "Control of Tech Spec Required Program Documents Assigned to MCE Engineering", defines the process to be followed when changes to the IST Program are made.

2. Inclusion of Flow Diagrams (reference NUREG-1482, Section 2.4.3)

   The staff recommends that flow diagrams be included in the program submittal to assist in finding the pumps and valves included in the program. This information will assist the staff in reviewing relief requests or proposed alternatives. A partial submittal of the program containing relief requests should include applicable drawings to support the relief requests or to supersede previous IST flow diagrams.

   IST flow diagrams need not be updated regularly, but if drawings change because of modifications, or if relief requests are affected, the staff recommends drawings be revised and submitted to the NRC in the next periodic submittal of revisions to the IST Program. The staff also recommends licensees include applicable drawings with relief requests that are very detailed and are submitted to supplement the IST Program.

Relief Request Template

Request Number:

ASME Code Component(s) Affected:

Applicable Code Edition and Addenda:

Applicable Code Requirement:

Reason for Request:

Proposed Alternative and Basis for Use:

Duration of Proposed Alternative:

Precedents (Optional):

References (Optional):

Note: There are a number templates available. Template selection should be based on the reason for the request. See NUREG 1482 for additional information and formats.

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:

Enclosure 9.4

System Piping Classification Correlation

Duke System Piping Classification	(1) Safety Related	NRC Quality Group	Duke QA Condition	ANSI Safety Class	Code Des. Criteria (6)	Seismic Pressure Boundary Integrity	Seismic Category	Normally Contains Radioactive Material
A	YES	A	1	1	Class 1, ASME Sect. III	YES	SC-I	YES
B	YES	B	1	2	Class 2, ASME Sect. III	YES	SC-I	YES
C	YES	C	1	3	Class 3, ASME Sect. III	YES	SC-I	YES
E	NO	D(3)	2(4)	NNS(2)	ANSI B31.1.0	NO	N/A	YES
F	No	D	4	NNS(2)	ANSI B31.1.0	YES	SC-II(7)	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-I	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.

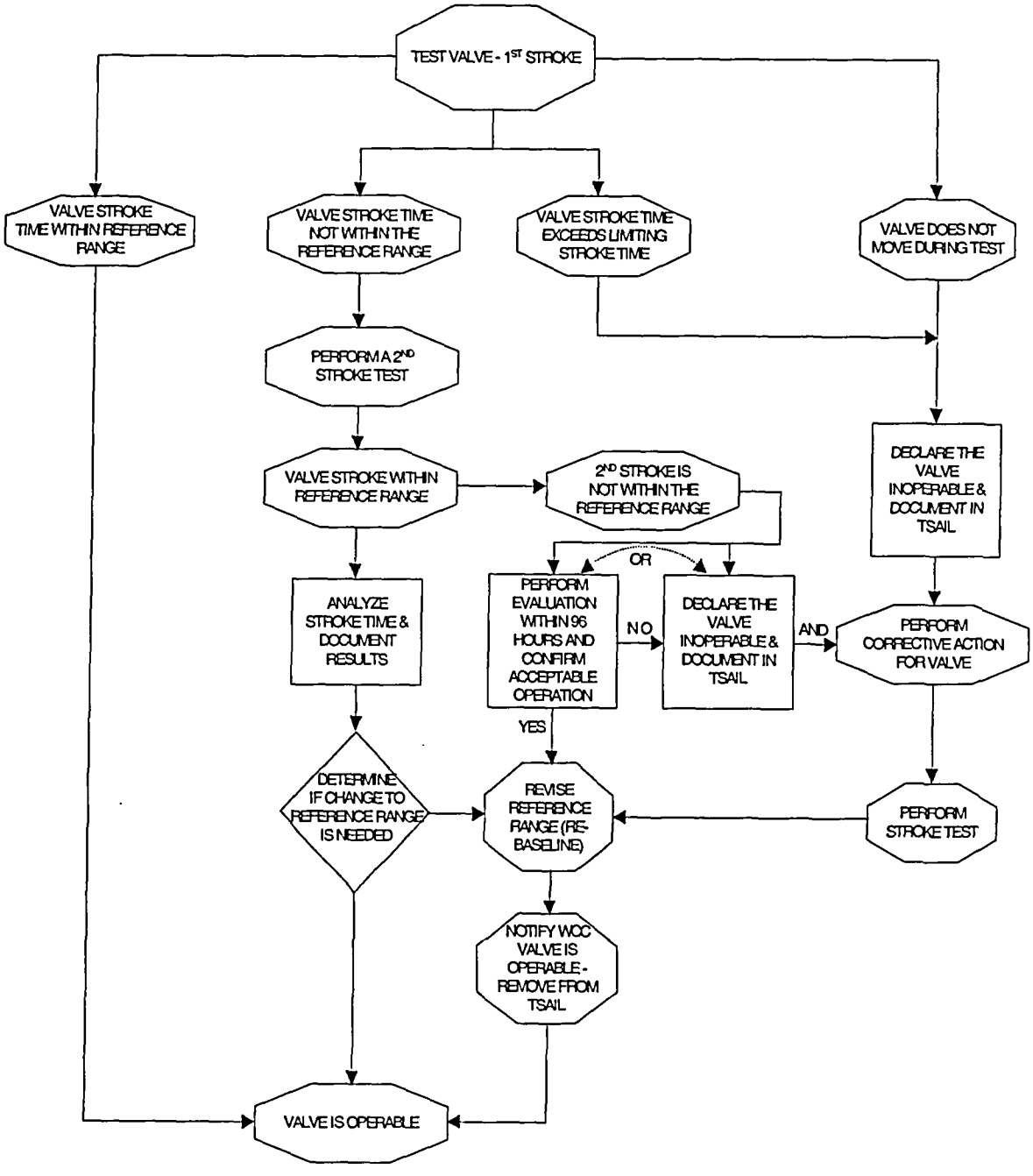
(4) Class E, G, and H piping systems may also be assigned QA Condition 3 and/or 4 to denote additional requirements for fire protection of safety related components and/ or seismic structural integrity (except pressure boundary) to preclude adverse interactions with safety related structures, systems and components, respectively; refer to Duke Nuclear Guide 1.29.

(5) Code and Standards Applicability: Duke Power Company establishes an "effective code date" in accordance with 10CFR50, par. 50.55a for Catawba 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-II Support Restraints to preclude adverse interactions with safety related structures, systems, and components. Refer to Duke Nuclear Guide 1.29.

(7) Class F for piping systems is used when pressure boundary protection is required. 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.

Enclosure 9.5
VALVE STROKE TIME DATA EVALUATION FLOW CHART



Enclosure 9.6

CATAWBA NUCLEAR STATION
MECHANICAL CIVIL ENGINEERING

NC PORV Stroke Requirement Position Statement

Subject: NC PORV Testing

Purpose: The purpose of this letter is clarify testing requirements for the NC PORVS

Position Statement:

The NC PORVs (NC32B, NC34A, NC36B) are considered cold shutdown valves. These valves are required to be tested each time the plant is in cold shutdown. This should be an air stroke (tests all 3 PORVs), or a combination of air and nitrogen (air to NC36B and nitrogen to the others) to ensure all three valves are exercised. Valves can be exempted from cold shutdown testing if tested within the previous 92 days.

These valves are required to be stroke tested prior to entering LTOP conditions. This is a Generic Letter 90-06 commitment. This can be an air or nitrogen stroke for the LTOP valves (NC32B and NC34A).

TS SR 3.4.11.2 requires a complete cycle of each PORV every 18 months with NC system cold legs > 200°F. This "hot stroke" can be accomplished with the air stroke if performed prior to entering LTOP and the temperature conditions are satisfied. (TS SR 3.4.11.2)

A nitrogen stroke must be performed every 18 months for NC32B and NC34A. This can satisfy the cold shutdown stroke and the LTOP stroke (if performed prior to LTOP) for the applicable PORVs. (TS SR 3.4.11.3)

If maintenance is performed, a post-maintenance stroke is required. This should be air and nitrogen if NC32B or NC34A had maintenance, or air only for NC36B.

Enclosure 9.7

CATAWBA NUCLEAR STATION
MECHANICAL CIVIL ENGINEERING

SA-1 & SA-4 POSITION STATEMENT

Subject: SA-1 & SA-4 Exclusion from the Inservice Testing Program

Purpose: The purpose of this letter is to document Engineering's position for not including valves SA-1 & SA-4 in the IST Program.

Position Statement:

Valves SA-1 (Main Steam B to CAPT Maintenance Isolation) and SA-4 (Main Steam C to CAPT Maintenance Isolation) are manual gate valves located in the Interior Doghouse immediately downstream of the respective SM piping. SA-1 and SA-4 were listed in Catawba Technical Specification, as Containment Isolation Valves. The valves are locked open and capable of local manual operation only. These valves are required to be open to supply steam to the CAPT from the respective SM piping for Engineered Safety Features (ESF) operation of the CAPT. However, CAPT operation can continue with one of these valves closed providing that steam is available from the opposite SM piping.

T/S 3.6.3 and UFSAR Table 6-77 are applicable to valves that are required to close on an ESF signal to ensure penetrations passing through containment are isolated during an accident. Valves SA-3 (S/G B Main Steam to CAPT Stop Check) and SA-6 (S/G C Main Steam to CAPT Stop Check) are stop check valves located in the Aux. Building Elevation 543' Mechanical Penetration Room, downstream (CAPT side) of valves SA-1 and SA-4 respectively, before the SA piping joins together to supply the CAPT. The piping and supports for SA-3 and SA-6 are procured and maintained within the constraints of ASME Class II (Duke Class B) standards; and are therefore, of acceptable construction to extend the penetration beyond the identified Containment Isolation Valves (SA-1 and SA-4). These valves are required to be open for CAPT operation when supplying steam to the CAPT from the respective SM piping. However, CAPT operation can continue with one of these valves closed provided steam is available from the opposite SM piping.

Catawba UFSAR Section 6.2.4.1, Containment Isolation System Design Basis (10CFR50, Appendix A, Criterion 57, Closed System Isolation Valves) originally listed valves SA-1 and SA-4 as Containment Isolation Valves. However, these valves have since been replaced in the UFSAR table 6-77 by valves SA-3 and SA-6, following a Design Study performed as a result of PIP 1-C-90-0008. The Design Study concluded that these valves and associated piping are of a sufficient design and construction for use as Containment Isolation Valves (as discussed previously) due to accessibility concerns with SA-1 and SA-4 for certain scenarios requiring the isolation of one steam supply to the CAPT. For the Main Steam Line break, environmental conditions in the Doghouse may prevent Operator access to these valves.

The following two accident scenarios require the isolation of one steam supply to the CAPT due to current dose assessment limitations and CA System operation requirements:

1) Steam Generator Tube Rupture (SGTR)
   and
2) Main Steam Line Break.

The dose calculations for Main Steam Line Break and SGTR scenarios assume limited release of main steam to the atmosphere. Operator action is taken as directed within current Emergency Operating Procedures (EP's) and/or Abnormal Operating Procedures (AP's) to manually close SA-3 and/or SA-6 as applicable in these scenarios. These valves are used in the EP's and AP's as opposed to SA-1 and SA-4 due to more assured accessibility as discussed previously. SA-1 and SA-4 are located in the Interior Doghouse and would not be accessible in the event of a high energy line break (i.e. Main Steam Line Break) in this Doghouse. However, SA-1 and SA-4 are the closest isolation valves to containment.

CATAWBA NUCLEAR STATION
MECHANICAL CIVIL ENGINEERING

SA-1 & SA-4 POSITION STATEMENT

If accessible, SA-1 and SA-4 can also be closed in a shorter time frame than SA-3 and SA-6. During a SGTR, the time required to manually close stop check valves SA-3 and SA-6 may increase due to "dress-out" requirements and increased radiation monitoring prior to entering the area due to contamination and increased dose in the mechanical penetration room. Therefore, if accessible, closing SA-1 and SA-4 would be preferable over SA-3 and SA-6. In each of these accident scenarios, the time required for an Operator to close the applicable valve has been estimated and factored into the Accident Analyses and resultant dose calculations. Calculated off-site doses are within allowable values for these scenarios.

For the SGTR scenario, failure to isolate steam to the CAPT from the S/G with the tube rupture would allow indefinite release of main steam to the atmosphere via the CAPT exhaust, which would consequently exceed the current dose calculations. Assuming no high energy line break in the Interior Doghouse during a SGTR accident, closing SA-1 and SA-4 would be preferable over SA-3 and SA-6. For the Main Steam Line Break scenario, SA-3 or SA-6 (depending on the break scenario) would automatically close (stop check valves) to prevent the diversion of steam from an intact steam line to the faulted piping and then to the atmosphere or into containment (depending on the location of the break) effectively depressurizing a second S/G, rendering the CAPT inoperable due to the loss of all steam supply, and also affecting the operation / flow balance of the Motor Driven CA pumps. The applicable SA line is isolated as a precaution in case of the check valve fails to close and isolate the faulted steam line. Unless the steam line break is located in the Interior Doghouse, closing SA-1 and SA-4 would be preferable over SA-3 and SA-6.

As a result of a Containment Integrity Review concluded in January of 1996, SA-1 and SA-4 were identified as the preferred valves for containment isolation purposes. UFSAR Table 6-77 was revised to list SA-1 and SA-4 as the Containment Isolation Valves for penetrations M261 and M363. Applicable Operations EP's and AP's would be revised to use SA-1 and SA-4 as the first response with the option for using SA-3 and SA-6. This recommendation recognizes the design acceptability of closing SA-3 and SA-6, if attempts to close SA-1 and SA-4 are unsuccessful. Section X of the Containment Integrity Review can be consulted if further information is required concerning these recommendations.

Following completion of the Containment Integrity Review, an exemption to 10CFR50 Appendix A was requested from the NRC allowing SA1 and SA4 to be used as containment isolation valves. The exemption to GDC 57 was granted by letter from the NRC on 12/29/98.

Enclosure 9.8

CATAWBA NUCLEAR STATION
MECHANICAL CIVIL ENGINEERING

Priority for Cold Shutdown Valve Testing During Unplanned Entry into Mode 5

The following table provides guidance relative to the order in which cold shutdown testing should occur. The order, or priority, is based on possible system conditions during Mode 5, placing of jumpers and sliding of links, etc. Valves should be tested in the order listed (if possible) so that the valves tested in the unit's preceding cold shutdown will be the last ones tested during the unit's next cold shutdown. Should a valve be unavailable for testing and subsequently passed over during any given forced entry into Mode 5, that valve should be one of the first tested during the unit's cold shutdown outage. Following a refueling outage, the testing sequence re-starts at item one.

	Valve		Valve		Valve		Valve
1	1(2)NC0032B	25	1(2)ND0002A	49	1(2)NV0188A	73	1(2)CF0048
2	1(2)NC0034A	26	1(2)ND0036B	50	1(2)NV0189B	74	1(2)CF0055
3	1(2)NC0036B	27	1(2)ND0037A	51	1(2)NV0202B	75	1(2)CF0057
4	1(2)NI0100B	28	1(2)NI0173A	52	1(2)NV0203A	76	1(2)NV0089A
5	1(2)NI0103A	29	1(2)NI0178B	53	1(2)NV0312A	77	1(2)NV0091B
6	1(2)NI0144A	30	1(2)NV0252A	54	1(2)NV0314B	78	1(2)KC0338B
7	1(2)NI0147B	31	1(2)NV0253B	55	1(2)NV0010A	79	1(2)KC0424B
8	1(2)NI0162A	32	1(2)SM0001	56	1(2)NV0011A	80	1(2)KC0425A
9	1(2)NI0121A	33	1(2)SM0003	57	1(2)NV0013A	81	1(2)RN0437B
10	1(2)NI0152B	34	1(2)SM0005	58	1(2)VI0077B	82	1(2)RN0484A
11	1(2)NI0332A	35	1(2)SM0007	59		83	1(2)RN0487B
12	1(2)NI0333B	36	2CA0149	60		84	1(2)RF0389B
13	1(2)NI0334B	37	2CA0150	61		85	1(2)RF0447B
14	1(2)KC0320A	38	2CA0151	62		86	
15	1(2)KC0332B	39	2CA0152	63		87	
16	1(2)KC0333A	40	1(2)CF0033	64		88	
17	1(2)NC0250A	41	1(2)CF0042	65	1(2)NI0010B	89	
18	1(2)NC0251B	42	1(2)CF0051	66	1(2)NI0184B	90	
19	1(2)NC0252B	43	1(2)CF0060	67	1(2)NI0185A	91	
20	1(2)NC0253A	44	1(2)NS0038B	68	1(2)CF0028	92	
21	1(2)NV0015B	45	1(2)NS0043A	69	1(2)CF0030	93	
22	1(2)ND0032A	46	1(2)ND0028A	70	1(2)CF0037	94	
23	1(2)ND0065B	47	1(2)NI0136B	71	1(2)CF0039	95	
24	1(2)ND0001B	48	1(2)NI0183B	72	1(2)CF0046		

CATAWBA NUCLEAR STATION
MECHANICAL CIVIL ENGINEERING

Priority for Cold Shutdown Valve Testing During Unplanned Entry into Mode 5

Special Notes:

1. Valves 1(2)KC0338B, 1(2)KC0424B, 1(2)KC0425A, 1(2)RN0437B, 1(2)RN0484A, 1(2)RN0487B, 1(2)NV0089A and 1(2)NV0091B are considered Cold Shutdown valves; however, exercising these valves while the reactor coolant pumps are in operation could result in pump damage. OM ISTC allows the test interval for these valves to be extended to refueling outages when the tests cannot be practically performed during power operations or cold shutdown outages (reference NUREG 1482, section 3.1.1.4).

2. The PORVs, valves 1(2)NC0032B, 1(2)NC0034A, 1(2)NC0036B are considered Cold Shutdown and are stroked EACH time the Unit enters Cold Shutdown. See Enclosure 9.6 in the IST Program Document for further guidance for testing valves 1(2)NC0032B, 1(2)NC0034A, and 1(2)NC0036B.

TABLE OF ABBREVIATIONS

Duke System Valve Class	Code Design Criteria	Designed for Seismic Loading	ANS Safety Class
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
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:

RELIEF REQUEST

CN - SRP - VG - 01

- 01 — SEQUENCE
- VG — SYSTEM (N/A if Generic)
- SRP — (SPECIFIC or GENERIC) RELIEF for (PUMP or VALVE)
- CN — STATION

JUSTIFICATION FOR DEFERRAL

CN - VG - 01

- 01 — SEQUENCE
- VG — SYSTEM
- CN — STATION

TABLE OF ABBREVIATIONS(cont)

Actuator Design	Description
AO	Air Operated
HO	Hydraulically Operated
MA	Manual
ML	Motor Operated – Limitorque
MR	Motor Operated – Rotork
SA	Self Actuating
SO	Solenoid Operated

ISTC VALVE CATEGORIES

Category A	Leakage is Critical
Category B	Leakage is NOT Critical
Category C	Self Actuating (Checks, Reliefs, Etc.,)

PUMP DESIGN

CP >= 600	Centrifugal Pump (greater than 600 rpm)
VLS	Vertical Line Shaft Pump
PDP	Positive Displacement Pump

DUKE POWER

CATAWBA NUCLEAR STATION

PUMP INSERVICE TESTING PROGRAM

Section 3.0

CATAWBA NUCLEAR STAT

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1CAPUA	CN -1592-01.00	CP >= 600	3	CN-SRP-CA1	1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
1CAPUB	CN -1592-01.00	CP >= 600	3	CN-SRP-CA1	1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
1CAPUTD	CN -1592-01.00	CP >= 600	3		(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
2CAPUA	CN -2592-01.00	CP >= 600	3	CN-SRP-CA1	Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					Measurement Point V1 (*)	Tested once quarterly
					Measurement Point H1 (*)	Tested once quarterly
					Measurement Point A1 (*)	Tested once quarterly
					Measurement Point V2 (*)	Tested once quarterly
					Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years

CATAWBA NUCLEAR STAT

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
2CAPUB	CN -2592-01.00	CP >= 600	3	CN-SRP-CA1	Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					Measurement Point V1 (*)	Tested once quarterly
					Measurement Point H1 (*)	Tested once quarterly
					Measurement Point A1 (*)	Tested once quarterly
					Measurement Point V2 (*)	Tested once quarterly
					Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
2CAPUTD	CN -2592-01.00	CP >= 600	3		Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					Measurement Point V1 (*)	Tested once quarterly
					Measurement Point H1 (*)	Tested once quarterly
					Measurement Point A1 (*)	Tested once quarterly
					Measurement Point V2 (*)	Tested once quarterly
					Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1KCPUA1	CN -1573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A2 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
1KCPUA2	CN -1573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A2 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
1KCPUB1	CN -1573-01.00	CP >= 600	3		(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A2 (*)	Tested once every two years
1KCPUB2	CN -1573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A2 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
2KCPUA1	CN -2573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
2KCPUA2	CN -2573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
2KCPUB1	CN -2573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
2KCPUB2	CN -2573-01.00	CP >= 600	3		2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1NDPUA	CN -1561-01.00	CP >= 600	2		4Measurement Point A3 (*)	Tested once quarterly
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point A3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					(Comp)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years
1NDPUB	CN -1561-01.01	CP >= 600	2		2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A3 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point A3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					(Comp)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years
2NDPUA	CN -2561-01.00	CP >= 600	2		(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					(Comp)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					4Measurement Point A3 (*)	Tested once quarterly
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point A3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
2NDPUB	CN -2561-01.01	CP >= 600	2		2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A3 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					(Comprehensive)Measurement Point A3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					(Comp)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1NIPUA	CN -1562-01.02	CP >= 600	2		1Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
1NIPUB	CN -1562-01.02	CP >= 600	2		1Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
2NIPUA	CN -2562-01.02	CP >= 600	2		(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					1Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
2NIPUB	CN -2562-01.02	CP >= 600	2		1Simple Flow + Simple DP (without Alert Ranges)	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Simple Flow (CPT)	Tested once every two years

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1NSPUA	CN -1563-01.00	CP >= 600	2		2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years
1NSPUB	CN -1563-01.00	CP >= 600	2		2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(ComprehensiveMeasurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years
2NSPUA	CN -2563-01.00	CP >= 600	2		(Comprehensive)Measurement Point A4 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
2NSPUB	CN -2563-01.00	CP >= 600	2		2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1NVPUACC	CN -1554-01.07	CP >= 600	2		1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
1NVPUBCC	CN -1554-01.07	CP >= 600	2		1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
1NVPUSB	CN -1554-01.08	PDP	NA		(Comp)Simple Flow (CPT) + Pressure Band (CPT)	Tested once every two years
					Simple Flow (without Alert Range) + DP Band	Tested once quarterly
2NVPUACC	CN -2554-01.07	CP >= 600	2		(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
					1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					5Measurement Point V2 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
2NVPUBCC	CN -2554-01.07 CN -2554-01.08	CP >= 600	2		1Simple Flow (without Alert Range) + DP Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					5Measurement Point V2 (*)	Tested once quarterly
					4Measurement Point A1 (*)	Tested once quarterly
					6Measurement Point H2 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V1 (*)	Tested once every two years
					(Comprehensive)Measurement Point H1 (*)	Tested once every two years
					(Comprehensive)Measurement Point A1 (*)	Tested once every two years
					(Comprehensive)Measurement Point V2 (*)	Tested once every two years
					(Comprehensive)Measurement Point H2 (*)	Tested once every two years
2NVPUSB	CN -2554-01.08	PDP	NA		(Comp)Simple Flow (CPT) + Pressure Band (CPT)	Tested once every two years
					Simple Flow (without Alert Range) + DP Band	Tested once quarterly

CATAWBA NUCLEAR STAT

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1RNPUA	CN -1574-01.00	VLS >= 600	3		1Simple DP (with Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years
1RNPUB	CN -1574-01.02	VLS >= 600	3		1Simple DP (with Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years
2RNPUA	CN -1574-01.00	VLS >= 600	3		(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years
					1Simple DP (with Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
2RNPUB	CN -1574-01.02	VLS >= 600	3		1Simple DP (with Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V3 (*)	Tested once quarterly
					3Measurement Point H3 (*)	Tested once quarterly
					4Measurement Point A4 (*)	Tested once quarterly
					5Measurement Point V4 (*)	Tested once quarterly
					6Measurement Point H4 (*)	Tested once quarterly
					(Comprehensive)Simple DP (CPT) + Flow Band	Tested once every two years

CATAWBA NUCLEAR STAT

RN - NUCLEAR SERVICE WATER SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
					(Comprehensive)Measurement Point V3 (*)	Tested once every two years
					(Comprehensive)Measurement Point H3 (*)	Tested once every two years
					(Comprehensive)Measurement Point V4 (*)	Tested once every two years
					(Comprehensive)Measurement Point H4 (*)	Tested once every two years
					(Comprehensive)Measurement Point A4 (*)	Tested once every two years

CATAWBA NUCLEAR STAT

YC - CONTROL AREA CHILLED WATER

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
0YCPUCW1	CN -1578-02.00	CP >= 600	3		1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point V2 (*)	Tested once quarterly
					5Measurement Point H2 (*)	Tested once quarterly
					6Measurement Point A2 (*)	Tested once quarterly
0YCPUCW2	CN -1578-02.02	CP >= 600	3		1Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					2Measurement Point V1 (*)	Tested once quarterly
					3Measurement Point H1 (*)	Tested once quarterly
					4Measurement Point V2 (*)	Tested once quarterly
					5Measurement Point H2 (*)	Tested once quarterly
					6Measurement Point A2 (*)	Tested once quarterly
		CP >= 600	1		Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					Measurement Point V1 (*)	Tested once quarterly
					Measurement Point H1 (*)	Tested once quarterly
					Measurement Point V2 (*)	Tested once quarterly
					Measurement Point H2 (*)	Tested once quarterly
					Measurement Point A2 (*)	Tested once quarterly
		CP >= 600	1		Simple DP (without Alert Range) + Flow Band	Tested once quarterly
					Measurement Point V1 (*)	Tested once quarterly
					Measurement Point H1 (*)	Tested once quarterly
					Measurement Point V2 (*)	Tested once quarterly
					Measurement Point H2 (*)	Tested once quarterly
					Measurement Point A2 (*)	Tested once quarterly

DUKE POWER

CATAWBA NUCLEAR STATION

VALVE INSERVICE TESTING PROGRAM

Section 4.0

CATAWBA NUCLEAR STAT

BB - S/G BLOWDOWN RECYCLE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1BB8A	CN -1580-01.00	MR	Category B		Yes	2			1BB8A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB10B	CN -1580-01.00	MR	Category B		Yes	2			1BB10B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB19A	CN -1580-01.00	MR	Category B		Yes	2			1BB19A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB21B	CN -1580-01.00	MR	Category B		Yes	2			1BB21B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB56A	CN -1580-01.00	MR	Category B		Yes	2			1BB56A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB57B	CN -1580-01.00	MR	Category B		Yes	2			1BB57B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB60A	CN -1580-01.00	MR	Category B		Yes	2			1BB60A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB61B	CN -1580-01.00	MR	Category B		Yes	2			1BB61B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

BB - S/G BLOWDOWN RECYCLE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1BB147B	CN -1580-01.00	MR	Category B		Yes	2			1BB147B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB148B	CN -1580-01.00	MR	Category B		Yes	2			1BB148B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB149B	CN -1580-01.00	MR	Category B		Yes	2			1BB149B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1BB150B	CN -1580-01.00	MR	Category B		Yes	2			1BB150B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB8A	CN -2580-01.00	MR	Category B		Yes	2			2BB8A - Stroke Time (Open to Closed)	Tested once quarterly
									2BB8A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB10B	CN -2580-01.00	MR	Category B		Yes	2			2BB10B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB10B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB19A	CN -2580-01.00	MR	Category B		Yes	2			2BB19A - Stroke Time (Open to Closed)	Tested once quarterly
									2BB19A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB21B	CN -2580-01.00	MR	Category B		Yes	2			2BB21B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB21B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

BB - S/G BLOWDOWN RECYCLE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2BB56A	CN -2580-01.00	MR	Category B		Yes	2			2BB56A - Stroke Time (Open to Closed)	Tested once quarterly
									2BB56A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB57B	CN -2580-01.00	MR	Category B		Yes	2			2BB57B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB57B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB60A	CN -2580-01.00	MR	Category B		Yes	2			2BB60A - Stroke Time (Open to Closed)	Tested once quarterly
									2BB60A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB61B	CN -2580-01.00	MR	Category B		Yes	2			2BB61B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB61B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB147B	CN -2580-01.00	MR	Category B		Yes	2			2BB147B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB147B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB148B	CN -2580-01.00	MR	Category B		Yes	2			2BB148B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB148B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB149B	CN -2580-01.00	MR	Category B		Yes	2			2BB149B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB149B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2BB150B	CN -2580-01.00	MR	Category B		Yes	2			2BB150B - Stroke Time (Open to Closed)	Tested once quarterly
									2BB150B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1CA8	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1CA10	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1CA12	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1CA15A	CN -1592-01.00	MR	Category B		Yes	3			1CA15A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1CA18B	CN -1592-01.00	MR	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA18B - Stroke Time (Closed to Open)	Tested once quarterly
1CA20	CN -1592-01.00	SA	Category C		Yes	3			1CA20 - Full Stroke (Open)	Tested once quarterly
1CA23	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Closed)	Condition Monitoring
									1CA23 - Full Stroke (Open)	Condition Monitoring
1CA27	CN -1592-01.00	SA	Category C		Yes	3			1CA27 - Full Stroke (Open)	Tested once quarterly
1CA28	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Closed)	Condition Monitoring
									1CA28 - Full Stroke (Open)	Condition Monitoring
1CA32	CN -1592-01.00	SA	Category C		Yes	3			1CA32 - Full Stroke (Open)	Tested once quarterly
1CA33	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Closed)	Condition Monitoring
									1CA33 - Full Stroke (Open)	Condition Monitoring
1CA36	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA36 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA37	CN -1592-01.01	SA	Category C		Yes	2			1CA37 - Full Stroke (Closed)	Continuous
									1CA37 - Full Stroke (Open)	Condition Monitoring
1CA38A	CN -1592-01.01	MR	Category B		Yes	2			1CA38A - Stroke Time (Open to Closed)	Tested once quarterly
									1CA38A - Stroke Time (Closed to Open)	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1CA38A - Position Indicator (Open)	Tested once every two years
									1CA38A - Position Indicator (Closed)	Tested once every two years
1CA40	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA40 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA41	CN -1592-01.01	SA	Category C		Yes	2			1CA41 - Full Stroke (Closed)	Continuous
									1CA41 - Full Stroke (Open)	Condition Monitoring
1CA42B	CN -1592-01.01	MR	Category B		Yes	2			1CA42B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA42B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA42B - Position Indicator (Open)	Tested once every two years
									1CA42B - Position Indicator (Closed)	Tested once every two years
1CA44	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA44 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA45	CN -1592-01.01	SA	Category C		Yes	2			1CA45 - Full Stroke (Closed)	Continuous
									1CA45 - Full Stroke (Open)	Condition Monitoring
1CA46B	CN -1592-01.01	MR	Category B		Yes	2			1CA46B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA46B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA46B - Position Indicator (Open)	Tested once every two years
									1CA46B - Position Indicator (Closed)	Tested once every two years
1CA48	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA48 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA49	CN -1592-01.01	SA	Category C		Yes	2			1CA49 - Full Stroke (Closed)	Continuous
									1CA49 - Full Stroke (Open)	Condition Monitoring
1CA50A	CN -1592-01.01	MR	Category B		Yes	2			1CA50A - Stroke Time	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open to Closed)	
									1CA50A - Stroke Time (Closed to Open)	Tested once quarterly
									1CA50A - Position Indicator (Open)	Tested once every two years
									1CA50A - Position Indicator (Closed)	Tested once every two years
1CA52	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA52 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA53	CN -1592-01.01	SA	Category C		Yes	2			1CA53 - Full Stroke (Closed)	Continuous
									1CA53 - Full Stroke (Open)	Condition Monitoring
1CA54B	CN -1592-01.01	MR	Category B		Yes	2			1CA54B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA54B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA54B - Position Indicator (Open)	Tested once every two years
									1CA54B - Position Indicator (Closed)	Tested once every two years
1CA56	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA56 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA57	CN -1592-01.01	SA	Category C		Yes	2			1CA57 - Full Stroke (Closed)	Continuous
									1CA57 - Full Stroke (Open)	Condition Monitoring
1CA58A	CN -1592-01.01	MR	Category B		Yes	2			1CA58A - Stroke Time (Open to Closed)	Tested once quarterly
									1CA58A - Stroke Time (Closed to Open)	Tested once quarterly
									1CA58A - Position Indicator (Open)	Tested once every two years
									1CA58A - Position Indicator (Closed)	Tested once every two years
1CA60	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA60 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA61	CN -1592-01.01	SA	Category C		Yes	2			1CA61 - Full Stroke (Closed)	Continuous

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1CA61 - Full Stroke (Open)	Condition Monitoring
1CA62A	CN -1592-01.01	MR	Category B		Yes	2			1CA62A - Stroke Time (Open to Closed)	Tested once quarterly
									1CA62A - Stroke Time (Closed to Open)	Tested once quarterly
									1CA62A - Position Indicator (Open)	Tested once every two years
									1CA62A - Position Indicator (Closed)	Tested once every two years
1CA64	CN -1592-01.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA64 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1CA65	CN -1592-01.01	SA	Category C		Yes	2			1CA65 - Full Stroke (Closed)	Continuous
									1CA65 - Full Stroke (Open)	Condition Monitoring
1CA66B	CN -1592-01.01	MR	Category B		Yes	2			1CA66B - Stroke Time (Open to Closed)	Tested once quarterly
									1CA66B - Stroke Time (Closed to Open)	Tested once quarterly
									1CA66B - Position Indicator (Open)	Tested once every two years
									1CA66B - Position Indicator (Closed)	Tested once every two years
1CA85B	CN -1592-01.00	MR	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1CA85B - Stroke Time (Closed to Open)	Tested once quarterly
1CA116A	CN -1592-01.00	MR	Category B		Yes	3			1CA116A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1CA149	CN -1592-01.01	AO	Category B		Yes	2			1CA149 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CA150	CN -1592-01.01	AO	Category B		Yes	2			1CA150 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to	Tested every refueling outage

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)	
									Position Indicator (Closed)	Tested once every two years
1CA151	CN -1592-01.01	AO	Category B		Yes	2			1CA151 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CA152	CN -1592-01.01	AO	Category B		Yes	2			1CA152 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CA173	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1CA185	CN -1592-01.01	AO	Category B		Yes	2			1CA185 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CA186	CN -1592-01.01	AO	Category B		Yes	2			1CA186 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CA187	CN -1592-01.01	AO	Category B		Yes	2			1CA187 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CA188	CN -1592-01.01	AO	Category B		Yes	2			1CA188 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position	Tested every refueling

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									and Timed (Open to Closed)	outage
									Position Indicator (Closed)	Tested once every two years
1CA255	CN -1592-01.00	SA	Category C		Yes	3			1CA255 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1CA256	CN -1592-01.00	SA	Category C		Yes	3			1CA256 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1CA257	CN -1592-01.00	SA	Category C		Yes	3			1CA257 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1CA291	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1CA292	CN -1592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2CA8	CN -2592-01.00	SA	Category C		Yes	3			2CA8 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2CA10	CN -2592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2CA12	CN -2592-01.00	SA	Category C		Yes	3			2CA12 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2CA15A	CN -2592-01.00	MR	Category B		Yes	3			2CA15A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA18B	CN -2592-01.00	MR	Category B		Yes	3			2CA18B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA20	CN -2592-01.00	SA	Category C		Yes	3			2CA20 - Full Stroke (Open)	Tested once quarterly
2CA23	CN -2592-01.00	SA	Category C		Yes	3			2CA23 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2CA27	CN -2592-01.00	SA	Category C		Yes	3			2CA27 - Full Stroke (Open)	Tested once quarterly
2CA28	CN -2592-01.00	SA	Category C		Yes	3			2CA28 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2CA32	CN -2592-01.00	SA	Category C		Yes	3			2CA32 - Full Stroke (Open)	Tested once quarterly
2CA33	CN -2592-01.00	SA	Category C		Yes	3			2CA33 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2CA-36	CN -2592-01.01	AO	Category B		Yes	3			2CA36 - Failed to Safe Pos and Timed (Cls to	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Opn)	
									Position Indicator (Open)	Tested once every two years
2CA37	CN -2592-01.01	SA	Category C		Yes	2			2CA37 - Full Stroke (Closed)	Continuous
									2CA37 - Full Stroke (Open)	Condition Monitoring
2CA38A	CN -2592-01.01	MR	Category B		Yes	2			2CA38A - Stroke Time (Open to Closed)	Tested once quarterly
									2CA38A - Stroke Time (Closed to Open)	Tested once quarterly
									2CA38A - Position Indicator (Open)	Tested once every two years
									2CA38A - Position Indicator (Closed)	Tested once every two years
2CA40	CN -2592-01.01	AO	Category B		Yes	3			2CA40 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA41	CN -2592-01.01	SA	Category C		Yes	2			2CA41 - Full Stroke (Closed)	Continuous
									2CA41 - Full Stroke (Open)	Condition Monitoring
2CA42B	CN -2592-01.01	MR	Category B		Yes	2			2CA42B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA42B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA42B - Position Indicator (Open)	Tested once every two years
									2CA42B - Position Indicator (Closed)	Tested once every two years
2CA44	CN -2592-01.01	AO	Category B		Yes	3			2CA44 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA45	CN -2592-01.01	SA	Category C		Yes	2			2CA45 - Full Stroke (Closed)	Continuous
									2CA45 - Full Stroke (Open)	Condition Monitoring
2CA46B	CN -2592-01.01	MR	Category B		Yes	2			2CA46B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA46B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA46B - Position Indicator (Open)	Tested once every two years
									2CA46B - Position	Tested once every two

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Closed)	years
2CA48	CN -2592-01.01	AO	Category B		Yes	3			2CA48 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA49	CN -2592-01.01	SA	Category C		Yes	2			2CA49 - Full Stroke (Closed)	Continuous
									2CA49 - Full Stroke (Open)	Condition Monitoring
2CA50A	CN -2592-01.01	MR	Category B		Yes	2			2CA50A - Stroke Time (Open to Closed)	Tested once quarterly
									2CA50A - Stroke Time (Closed to Open)	Tested once quarterly
									2CA50A - Position Indicator (Open)	Tested once every two years
									2CA50A - Position Indicator (Closed)	Tested once every two years
2CA52	CN -2592-01.01	AO	Category B		Yes	3			2CA52 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA53	CN -2592-01.01	SA	Category C		Yes	2			2CA53 - Full Stroke (Closed)	Continuous
									2CA53 - Full Stroke (Open)	Condition Monitoring
2CA54B	CN -2592-01.01	MR	Category B		Yes	2			2CA54B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA54B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA54B - Position Indicator (Open)	Tested once every two years
									2CA54B - Position Indicator (Closed)	Tested once every two years
2CA56	CN -2592-01.01	AO	Category B		Yes	3			2CA56 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA57	CN -2592-01.01	SA	Category C		Yes	2			2CA57 - Full Stroke (Closed)	Continuous
									2CA57 - Full Stroke (Open)	Condition Monitoring
2CA58A	CN -2592-01.01	MR	Category B		Yes	2			2CA58A - Stroke Time (Open to Closed)	Tested once quarterly
									2CA58A - Stroke Time (Closed to Open)	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2CA58A - Position Indicator (Open)	Tested once every two years
									2CA58A - Position Indicator (Closed)	Tested once every two years
2CA60	CN -2592-01.01	AO	Category B		Yes	3			2CA60 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA61	CN -2592-01.01	SA	Category C		Yes	2			2CA61 - Full Stroke (Closed)	Continuous
									2CA61 - Full Stroke (Open)	Condition Monitoring
2CA62A	CN -2592-01.01	MR	Category B		Yes	2			2CA62A - Stroke Time (Open to Closed)	Tested once quarterly
									2CA62A - Stroke Time (Closed to Open)	Tested once quarterly
									2CA62A - Position Indicator (Open)	Tested once every two years
									2CA62A - Position Indicator (Closed)	Tested once every two years
2CA64	CN -2592-01.01	AO	Category B		Yes	3			2CA64 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA65	CN -2592-01.01	SA	Category C		Yes	2			2CA65 - Full Stroke (Closed)	Continuous
									2CA65 - Full Stroke (Open)	Condition Monitoring
2CA66B	CN -2592-01.01	MR	Category B		Yes	2			2CA66B - Stroke Time (Open to Closed)	Tested once quarterly
									2CA66B - Stroke Time (Closed to Open)	Tested once quarterly
									2CA66B - Position Indicator (Open)	Tested once every two years
									2CA66B - Position Indicator (Closed)	Tested once every two years
2CA85B	CN -2592-01.00	MR	Category B		Yes	3			2CA85B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA116A	CN -2592-01.00	MR	Category B		Yes	3			2CA116A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2CA149	CN -2592-01.01	AO	Category B		Yes	2		CN-ca05	2CA149 - Failed to Safe Pos and Timed (Opn to	Tested at cold shutdown

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Cls)	
									2CA149 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA150	CN -2592-01.01	AO	Category B		Yes	2		CN-ca05	2CA150 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CA150 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA151	CN -2592-01.01	AO	Category B		Yes	2		CN-ca05	2CA151 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CA151 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA152	CN -2592-01.01	AO	Category B		Yes	2		CN-ca05	2CA152 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CA152 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA173	CN -2592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2CA185	CN -2592-01.01	AO	Category B		Yes	2			2CA185 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA186	CN -2592-01.01	AO	Category B		Yes	2			2CA186 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA187	CN -2592-01.01	AO	Category B		Yes	2			2CA187 - Failed to Safe	Tested once quarterly

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Pos and Timed (Opn to Cls)	
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA188	CN -2592-01.01	AO	Category B		Yes	2			2CA188 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CA255	CN -2592-01.00	SA	Category C		Yes	3			2CA255 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2CA256	CN -2592-01.00	SA	Category C		Yes	3			2CA256 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2CA257	CN -2592-01.00	SA	Category C		Yes	3			2CA257 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2CA291	CN -2592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2CA292	CN -2592-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1CF28	CN -1591-01.01	AO	Category B		Yes	3		CN-cf04	1CF28 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF28 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF30	CN -1591-01.01	AO	Category B		Yes	NA		CN-cf05	1CF30 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
									1CF30 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1CF31	CN -1591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1CF33	CN -1591-01.01	HO	Category B		Yes	2		CN-cf01	Position Indicator (Closed)	Tested once every two years
									1CF33 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF33 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1CF37	CN -1591-01.01	AO	Category B		Yes	3		CN-cf04	Position Indicator (Closed)	Tested once every two years
									1CF37 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF37 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1CF39	CN -1591-01.01	AO	Category B		Yes	NA		CN-cf05	Position Indicator (Closed)	Tested once every two years
									1CF39 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF39 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1CF40	CN -1591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1CF42	CN -1591-01.01	HO	Category B		Yes	2		CN-cf01	Position Indicator (Closed)	Tested once every two years
									1CF42 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1CF42 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1CF46	CN -1591-01.01	AO	Category B		Yes	3		CN-cf04	1CF46 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF46 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF48	CN -1591-01.01	AO	Category B		Yes	NA		CN-cf05	Position Indicator (Closed)	Tested once every two years
									1CF48 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF48 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1CF49	CN -1591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1CF51	CN -1591-01.01	HO	Category B		Yes	2		CN-cf01	1CF51 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF51 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF55	CN -1591-01.01	AO	Category B		Yes	3		CN-cf04	1CF55 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF55 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF57	CN -1591-01.01	AO	Category B		Yes	NA		CN-cf05	1CF57 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1CF57 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF58	CN -1591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1CF60	CN -1591-01.01	HO	Category B		Yes	2		CN-cf01	1CF60 - Failed to Safe Pos and Timed (Opn to	Tested at cold shutdown

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Cls)	
									1CF60 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF87	CN -1591-01.01	AO	Category B		Yes	2			1CF87 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF88	CN -1591-01.01	AO	Category B		Yes	2			1CF88 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF89	CN -1591-01.01	AO	Category B		Yes	2			1CF89 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1CF90	CN -1591-01.01	AO	Category B		Yes	2			1CF90 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF28	CN -2591-01.01	AO	Category B		Yes	3		CN-cf04	2CF28 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF28 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF30	CN -2591-01.01	AO	Category B		Yes	NA		CN-cf05	2CF30 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2CF30 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF31	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF33	CN -2591-01.01	HO	Category B		Yes	2		CN-cf01	2CF33 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF33 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF37	CN -2591-01.01	AO	Category B		Yes	3		CN-cf04	2CF37 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF37 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF39	CN -2591-01.01	AO	Category B		Yes	NA		CN-cf05	2CF39 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF39 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF40	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF42	CN -2591-01.01	HO	Category B		Yes	2		CN-cf01	2CF42 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF42 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF46	CN -2591-01.01	AO	Category B		Yes	3		CN-cf04	2CF46 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF46 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2CF48	CN -2591-01.01	AO	Category B		Yes	NA		CN-cf05	2CF48 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF48 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF49	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF51	CN -2591-01.01	HO	Category B		Yes	2		CN-cf01	2CF51 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF51 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF55	CN -2591-01.01	AO	Category B		Yes	3		CN-cf04	2CF55 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF55 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF57	CN -2591-01.01	AO	Category B		Yes	NA		CN-cf05	2CF57 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF57 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF58	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF60	CN -2591-01.01	HO	Category B		Yes	2		CN-cf01	2CF60 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF60 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF87	CN -2591-01.01	AO	Category B		Yes	2			2CF87 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2CF87 - Failed to Safe Pos and Timed (Opn to	Tested every refueling outage

CF - FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Cls)	
									Position Indicator (Closed)	Tested once every two years
2CF88	CN -2591-01.01	AO	Category B		Yes	2			2CF88 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2CF88 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF89	CN -2591-01.01	AO	Category B		Yes	2			2CF89 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2CF89 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									2CF89 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2CF90	CN -2591-01.01	AO	Category B		Yes	2			2CF90 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2CF90 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2CF166	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF167	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF168	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2CF169	CN -2591-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

FD - D/ G ENGINE FUEL OIL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1FD22	CN -1609-03.00	SO	Category B		Yes	3			1FD22 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									1FD22 - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1FD62	CN -1609-03.01	SO	Category B		Yes	3			1FD62 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									1FD62 - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2FD22	CN -2609-03.00	SO	Category B		Yes	3			2FD22 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									2FD22 - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2FD62	CN -2609-03.01	SO	Category B		Yes	3			2FD62 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									2FD62 - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly

CATAWBA NUCLEAR STAT

FW - REFUELING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1FW1A	CN -1571-01.00	MR	Category B		Yes	2			1FW1A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1FW4	CN -1571-01.00	MA	Category A		Yes	2			1FW4 - Leak Test - Appendix J (Accident Direct)	Condition Monitoring
1FW5	CN -1571-01.00	SA	Category AC		Yes	2			1FW5 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1FW11	CN -1571-01.00	MA	Category A		Yes	2			1FW11 - Leak Test - Appendix J (Reverse Direct)	Condition Monitoring
1FW13	CN -1571-01.00	MA	Category A		Yes	2			1FW13 - Leak Test - Appendix J (Accident Direct)	Condition Monitoring
1FW27A	CN -1571-01.00	MR	Category B		Yes	2			1FW27A - Stroke Time (Open to Closed)	Tested once quarterly
									1FW27A - Stroke Time (Open to Closed)	Tested every refueling outage
									1FW27A - Stroke Time (Closed to Open)	Tested once quarterly
									1FW27A - Stroke Time (Closed to Open)	Tested every refueling outage
									1FW27A - Position Indicator (Open)	Tested once every two years
									1FW27A - Position Indicator (Closed)	Tested once every two years
1FW28	CN -1571-01.00	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1FW32B	CN -1571-01.00	MR	Category B		Yes	2			1FW32B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1FW33A	CN -1571-01.00	ML	Category B		Yes	2			1FW33A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1FW49B	CN -1571-01.00	ML	Category B		Yes	2			1FW49B - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

FW - REFUELING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1FW52	CN -1571-01.00	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
1FW55B	CN -1571-01.00	MR	Category B		Yes	2			1FW55B - Stroke Time (Closed to Open)	Tested every refueling outage
									1FW55B - Position Indicator (Open)	Tested once every two years
									1FW55B - Position Indicator (Closed)	Tested once every two years
									1FW55B - Stroke Time (Open to Closed)	Tested once quarterly
									1FW55B - Stroke Time (Open to Closed)	Tested every refueling outage
									1FW55B - Stroke Time (Closed to Open)	Tested once quarterly
1FW56	CN -1571-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2FW1A	CN -2571-01.00	MR	Category B		Yes	2			2FW1A - Stroke Time (Open to Closed)	Tested once quarterly
									2FW1A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2FW4	CN -2571-01.00	MA	Category A		Yes	2			2FW4 - Leak Test - Appendix J (Accident Direct)	Condition Monitoring
2FW5	CN -2571-01.00	SA	Category AC		Yes	2			Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2FW11	CN -2571-01.00	MA	Category A		Yes	2			2FW11 - Leak Test - Appendix J (Reverse Direct)	Condition Monitoring
2FW13	CN -2571-01.00	MA	Category A		Yes	2			2FW13 - Leak Test - Appendix J (Accident Direct)	Condition Monitoring
2FW27A	CN -2571-01.00	MR	Category B		Yes	2			2FW27A - Stroke Time (Open to Closed)	Tested once quarterly
									2FW27A - Stroke Time (Open to Closed)	Tested every refueling outage
									2FW27A - Stroke Time (Closed to Open)	Tested once quarterly
									2FW27A - Stroke Time (Closed to Open)	Tested every refueling outage
									2FW27A - Position Indicator (Open)	Tested once every two years

CATAWBA NUCLEAR STAT

FW - REFUELING WATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2FW27A - Position Indicator (Closed)	Tested once every two years
2FW28	CN -2571-01.00	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2FW32B	CN -2571-01.00	MR	Category B		Yes	2			2FW32B - Stroke Time (Open to Closed)	Tested once quarterly
									2FW32B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2FW33A	CN -2571-01.00	ML	Category B		Yes	2			2FW33A - Stroke Time (Open to Closed)	Tested once quarterly
									2FW33A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2FW49B	CN -2571-01.00	ML	Category B		Yes	2			2FW49B - Stroke Time (Open to Closed)	Tested once quarterly
									2FW49B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2FW52	CN -2571-01.00	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
2FW55B	CN -2571-01.00	MR	Category B		Yes	2			2FW55B - Stroke Time (Open to Closed)	Tested once quarterly
									2FW55B - Stroke Time (Open to Closed)	Tested every refueling outage
									2FW55B - Stroke Time (Closed to Open)	Tested once quarterly
									2FW55B - Stroke Time (Closed to Open)	Tested every refueling outage
									2FW55B - Position Indicator (Open)	Tested once every two years
									2FW55B - Position Indicator (Closed)	Tested once every two years
2FW56	CN -2571-01.00	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring

CATAWBA NUCLEAR STAT

IAE - CONTAINMENT PERSONNEL AIR LOCK

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1IASV5080		SO	Category A		Yes	2			1IASV5080 - Position Indicator (Closed)	Tested every refueling outage
									1IASV5080 - Leak Test - Appendix J (Reverse Direc	Condition Monitoring
									Fast Acting Stroke Time (Open to Closed)	Tested once quarterly
									Fast Acting Stroke Time (Open to Closed)	Tested every refueling outage
1IASV5160		SO	Category A		Yes	2			1IASV5160 - Position Indicator (Closed)	Tested every refueling outage
									1IASV5160 - Leak Test - Appendix J (Reverse Direc	Condition Monitoring
									Fast Acting Stroke Time (Open to Closed)	Tested once quarterly
									Fast Acting Stroke Time (Open to Closed)	Tested every refueling outage
1IACK5260		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5270		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5280		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5290		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5300		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5310		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5320		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5330		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5340		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5350		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

IAE - CONTAINMENT PERSONNEL AIR LOCK

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1IACK5360		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5370		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IACK5380		SA	Category AC		Yes	2			Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1IACK5390		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1IASV5400		SO	Category A		Yes	2			1IASV5400 - Position Indicator (Closed)	Tested once every two years
									1IASV5400 - Leak Test - Appendix J (Accident Direc	Condition Monitoring
									Fast Acting Stroke Time (Open to Closed)	Tested once quarterly
									Fast Acting Stroke Time (Open to Closed)	Tested every refueling outage
1IASV5410		SO	Category A		Yes	2			1IASV5410 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1IASV5410 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									1IASV5410 - Position Indicator (Closed)	Tested once every two years
									1IASV5410 - Leak Test - Appendix J (Accident Direc	Condition Monitoring
2IASV5080		SO	Category A		Yes	2			2IASV5080 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2IASV5080 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2IASV5080 - Position Indicator (Closed)	Tested every refueling outage
									2IASV5080 - Leak Test - Appendix J (Reverse Direc	Condition Monitoring
2IASV5160		SO	Category A		Yes	2			2IASV5160 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2IASV5160 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2IASV5160 - Position Indicator (Closed)	Tested every refueling outage
									2IASV5160 - Leak Test - Appendix J (Reverse Direc	Condition Monitoring

CATAWBA NUCLEAR STAT

IAE - CONTAINMENT PERSONNEL AIR LOCK

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2IACK5260		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5270		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5280		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5290		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5300		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5310		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5320		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5330		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5340		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5350		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5360		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5370		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5380		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IACK5390		SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2IASV5400		SO	Category A		Yes	2			2IASV5400 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2IASV5400 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2IASV5400 - Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

IAE - CONTAINMENT PERSONNEL AIR LOCK

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2IASV5400 - Leak Test - Appendix J (Accident Direc	Tested every refueling outage
2IASV5410		SO	Category A		Yes	2			2IASV5410 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2IASV5410 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2IASV5410 - Position Indicator (Closed)	Tested once every two years
									2IASV5410 - Leak Test - Appendix J (Accident Direc	Condition Monitoring

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC1A	CN -1573-01.00	ML	Category B		Yes	3			1KC1A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC2B	CN -1573-01.00	ML	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC2B - Stroke Time (Open to Closed)	Tested once quarterly
1KC3A	CN -1573-01.00	MR	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC3A - Stroke Time (Open to Closed)	Tested once quarterly
1KC5	CN -1573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1KC8	CN -1573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1KC11	CN -1573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1KC14	CN -1573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1KC18B	CN -1573-01.00	MR	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC18B - Stroke Time (Open to Closed)	Tested once quarterly
1KC47	CN -1573-01.05	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1KC50A	CN -1573-01.00	ML	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC50A - Stroke Time (Open to Closed)	Tested once quarterly
1KC53B	CN -1573-01.00	ML	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC53B - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC56A	CN -1573-02.00	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									Stroke Time (Closed to Open)	Tested every refueling outage
									1KC56A - Stroke Time (Closed to Open)	Tested once quarterly
1KC57A	CN -1573-02.00	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
									1KC57A - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1KC81B	CN -1573-02.01	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									Stroke Time (Closed to Open)	Tested every refueling outage
									1KC81B - Stroke Time (Closed to Open)	Tested once quarterly
1KC82B	CN -1573-02.01	AO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
									1KC82B - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
1KC228B	CN -1573-01.00	MR	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC228B - Stroke Time (Open to Closed)	Tested once quarterly
1KC230A	CN -1573-01.00	MR	Category B		Yes	3			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC230A - Stroke Time (Open to Closed)	Tested once quarterly
1KC279	CN -1573-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1KC280	CN -1573-01.03	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1KC281	CN -1573-01.03	SA	Category C		Yes	2			1KC281 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KC305B	CN -1573-01.03	MR	Category B		Yes	2			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC305B - Stroke Time (Open to Closed)	Tested once quarterly
									1KC305B - Leak Test Using NW System	Tested every refueling outage
1KC313	CN -1573-01.03	SA	Category C		Yes	3			1KC313 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC315B	CN -1573-01.03	MR	Category B		Yes	2			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1KC315B - Stroke Time (Open to Closed)	Tested once quarterly
									1KC315B - Leak Test Using NW System	Tested every refueling outage
1KC320A	CN -1573-01.03	MR	Category B		Yes	2		CN-kc01	Position Indicator (Closed)	Tested once every two years
									1KC320A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1KC320A - Stroke Time (Open to Closed)	Tested every refueling outage
									1KC320A - Leak Test Using NW System	Tested every refueling outage
1KC322	CN -1573-01.03	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1KC330	CN -1573-01.03	SA	Category C		Yes	3			Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC332B	CN -1573-01.03	MR	Category B		Yes	2		CN-kc01	1KC332B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1KC332B - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC333A	CN -1573-01.03	MR	Category B		Yes	2		CN-kc01	1KC333A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1KC333A - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC338B	CN -1573-01.03	MR	Category B		Yes	2		CN-kc02	1KC338B - Stroke Time (Open to Closed)	Tested at cold shutdown

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1KC338B - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC340	CN -1573-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1KC355	CN -1573-01.07	SA	Category C		Yes	3			1KC355 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC361	CN -1573-01.07	SA	Category C		Yes	3			1KC361 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC374	CN -1573-01.07	SA	Category C		Yes	3			Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC380	CN -1573-01.07	SA	Category C		Yes	3			1KC380 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC386	CN -1573-01.04	SA	Category C		Yes	3			1KC386 - Relief Valve Test (Closed to Open)	Tested every refueling outage
1KC392	CN -1573-01.04	SA	Category C		Yes	3			1KC392 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC404	CN -1573-01.04	SA	Category C		Yes	3			1KC404 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC410	CN -1573-01.04	SA	Category C		Yes	3			1KC410 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KC424B	CN -1573-01.03	MR	Category B		Yes	2		CN-kc02	1KC424B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1KC424B - Stroke Time (Open to Closed)	Tested every refueling outage
									1KC424B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC425A	CN -1573-01.03	MR	Category B		Yes	2		CN-kc02	1KC425A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1KC425A - Stroke Time (Open to Closed)	Tested every refueling outage
									1KC425A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC429B	CN -1573-01.05	ML	Category A		Yes	2			1KC429B - Stroke Time (Open to Closed)	Tested once quarterly
									1KC429B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to	Tested every refueling

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)	outage
									Position Indicator (Closed)	Tested once every two years
1KC430A	CN -1573-01.05	ML	Category A		Yes	2			1KC430A - Stroke Time (Open to Closed)	Tested once quarterly
									1KC430A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KC814	CN -1573-01.05	SA	Category C		Yes	3			1KC814 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1KCC37A	CN -1573-01.00	MR	Category B		Yes	3			1KCC37A - Stroke Time (Open to Closed)	Tested once quarterly
									1KCC37A - Stroke Time (Closed to Open)	Tested once quarterly
									1KCC37A - Position Indicator (Open)	Tested once every two years
									1KCC37A - Position Indicator (Closed)	Tested once every two years
1KCC40B	CN -1573-01.00	MR	Category B		Yes	3			1KCC40B - Stroke Time (Open to Closed)	Tested once quarterly
									1KCC40B - Stroke Time (Closed to Open)	Tested once quarterly
									1KCC40B - Position Indicator (Open)	Tested once every two years
									1KCC40B - Position Indicator (Closed)	Tested once every two years
2KC1A	CN -2573-01.00	ML	Category B		Yes	3			2KC1A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC2B	CN -2573-01.00	ML	Category B		Yes	3			2KC2B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC2B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC3A	CN -2573-01.00	MR	Category B		Yes	3			2KC3A - Stroke Time (Open to Closed)	Tested once quarterly
									2KC3A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2KC5	CN -2573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2KC8	CN -2573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2KC11	CN -2573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2KC14	CN -2573-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2KC18B	CN -2573-01.00	MR	Category B		Yes	3			2KC18B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC18B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC47	CN -2573-01.05	SA	Category AC		Yes	2			2KC47 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2KC50A	CN -2573-01.00	MR	Category B		Yes	3			2KC50A - Stroke Time (Open to Closed)	Tested once quarterly
									2KC50A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC53B	CN -2573-01.00	MR	Category B		Yes	3			2KC53B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC53B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC56A	CN -2573-02.00	ML	Category B		Yes	3			2KC56A - Stroke Time (Closed to Open)	Tested once quarterly
									2KC56A - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
2KC57A	CN -2573-02.00	AO	Category B		Yes	3			2KC57A - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
2KC81B	CN -2573-02.01	ML	Category B		Yes	3			2KC81B - Stroke Time (Closed to Open)	Tested once quarterly
									2KC81B - Stroke Time (Closed to Open)	Tested every refueling outage

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Position Indicator (Open)	Tested once every two years
2KC82B	CN -2573-02.01	AO	Category B		Yes	3			2KC82B - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
2KC228B	CN -2573-01.00	MR	Category B		Yes	3			2KC228B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC228B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC230A	CN -2573-01.00	MR	Category B		Yes	3			2KC230A - Stroke Time (Open to Closed)	Tested once quarterly
									2KC230A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC279	CN -2573-01.03	SA	Category AC		Yes	2			2KC279 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2KC280	CN -2573-01.03	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2KC281	CN -2573-01.03	SA	Category C		Yes	2			2KC281 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC305B	CN -2573-01.03	MR	Category B		Yes	2			2KC305B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC305B - Stroke Time (Open to Closed)	Tested every refueling outage
									2KC305B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC313	CN -2573-01.03	SA	Category C		Yes	3			2KC313 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC315B	CN -2573-01.03	MR	Category B		Yes	2			2KC315B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC315B - Stroke Time (Open to Closed)	Tested every refueling outage
									2KC315B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2KC320A	CN -2573-01.03	MR	Category B		Yes	2		CN-kc01	2KC320A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2KC320A - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC322	CN -2573-01.03	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2KC330	CN -2573-01.03	SA	Category C		Yes	3			Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC332B	CN -2573-01.03	MR	Category B		Yes	2		CN-kc01	2KC332B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2KC332B - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC333A	CN -2573-01.03	MR	Category B		Yes	2		CN-kc01	2KC333A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2KC333A - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC338B	CN -2573-01.03	MR	Category B		Yes	2		CN-kc02	2KC338B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2KC338B - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC340	CN -2573-01.03	SA	Category AC		Yes	2			2KC340 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2KC355	CN -2573-01.07	SA	Category C		Yes	3			2KC355 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC361	CN -2573-01.07	SA	Category C		Yes	3			2KC361 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC374	CN -2573-01.07	SA	Category C		Yes	3			Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC380	CN -2573-01.07	SA	Category C		Yes	3			2KC380 - Relief Valve Test (Closed to Open)	Tested every refueling outage

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2KC386	CN -2573-01.04	SA	Category C		Yes	3			2KC386 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC392	CN -2573-01.04	SA	Category C		Yes	3			2KC392 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC410	CN -2573-01.04	SA	Category C		Yes	3			2KC410 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KC424B	CN -2573-01.03	MR	Category B		Yes	2		CN-kc02	2KC424B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2KC424B - Stroke Time (Open to Closed)	Tested every refueling outage
									2KC424B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC425A	CN -2573-01.03	MR	Category B		Yes	2		CN-kc02	2KC425A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2KC425A - Stroke Time (Open to Closed)	Tested every refueling outage
									2KC425A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KC429B	CN -2573-01.05	ML	Category A		Yes	2			2KC429B - Stroke Time (Open to Closed)	Tested once quarterly
									2KC429B - Stroke Time (Open to Closed)	Tested every refueling outage
									2KC429B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2KC430A	CN -2573-01.05	ML	Category A		Yes	2			2KC430A - Stroke Time (Open to Closed)	Tested once quarterly
									2KC430A - Stroke Time (Open to Closed)	Tested every refueling outage
									2KC430A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2KC814	CN -2573-01.05	SA	Category C		Yes	3			2KC814 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2KCC37A	CN -2573-01.00	MR	Category B		Yes	3			2KCC37A - Stroke Time (Open to Closed)	Tested once quarterly
									2KCC37A - Stroke Time (Closed to Open)	Tested once quarterly
									2KCC37A - Position Indicator (Open)	Tested once every two years

CATAWBA NUCLEAR STAT

KC - COMPONENT COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2KCC37A - Position Indicator (Closed)	Tested once every two years
2KCC40B	CN -2573-01.00	MR	Category B		Yes	3			2KCC40B - Stroke Time (Open to Closed)	Tested once quarterly
									2KCC40B - Stroke Time (Closed to Open)	Tested once quarterly
									2KCC40B - Position Indicator (Open)	Tested once every two years
									2KCC40B - Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

KF - SPENT FUEL COOLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KF101B	CN -1570-01.00	MR	Category B		Yes	2			1KF101B - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1KF103A	CN -1570-01.00	MR	Category B		Yes	2			1KF103A - Stroke Time (Open to Closed)	Tested once quarterly
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KF101B	CN -2570-01.00	MO	Category B		Yes	2			2KF101B - Stroke Time (Open to Closed)	Tested once quarterly
									2KF101B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2KF103A	CN -2570-01.00	MO	Category B		Yes	2			2KF103A - Stroke Time (Open to Closed)	Tested once quarterly
									2KF103A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

LD - D/G ENGINE LUBE OIL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1LD17	CN -1609-02.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1LD18	CN -1609-02.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1LD47	CN -1609-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1LD48	CN -1609-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2LD17	CN -2609-02.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2LD18	CN -2609-02.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2LD47	CN -2609-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2LD48	CN -2609-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

MI - MISCELLANEOUS STATION INST

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1MISV5230		SO	Category A		Yes	2			1MISV5230 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5230 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									1MISV5230 - Position Indicator (Closed)	Tested every refueling outage
									1MISV5230 - Leak Test - Appendix J (Reverse Direc	Tested every refueling outage
1MISV5231		SO	Category A		Yes	2			1MISV5231 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5231 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									1MISV5231 - Position Indicator (Closed)	Tested every refueling outage
									1MISV5231 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MISV5232		SO	Category A		Yes	2			1MISV5232 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5232 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									1MISV5232 - Position Indicator (Closed)	Tested every refueling outage
									1MISV5232 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MISV5233		SO	Category A		Yes	2			1MISV5233 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									1MISV5233 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									1MISV5233 - Position Indicator (Closed)	Tested every refueling outage
									1MISV5233 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MIMV6470		MA	Category A		Yes	2			1MIMV6470 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MIMV6471		MA	Category A		Yes	2			1MIMV6471 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MIMV6480		MA	Category A		Yes	2			1MIMV6480 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MIMV6481		MA	Category A		Yes	2			1MIMV6481 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MIMV6490		MA	Category A		Yes	2			1MIMV6490 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
1MIMV6491		MA	Category A		Yes	2			1MIMV6491 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MISV5230		SO	Category A		Yes	2			2MISV5230 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5230 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage

CATAWBA NUCLEAR STAT

MI - MISCELLANEOUS STATION INST

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2MISV5230 - Position Indicator (Closed)	Tested every refueling outage
									2MISV5230 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MISV5231		SO	Category A		Yes	2			2MISV5231 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2MISV5231 - Position Indicator (Closed)	Tested every refueling outage
									2MISV5231 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
									2MISV5231 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
2MISV5232		SO	Category A		Yes	2			2MISV5232 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5232 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2MISV5232 - Position Indicator (Closed)	Tested every refueling outage
									2MISV5232 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MISV5233		SO	Category A		Yes	2			2MISV5233 - Fast Acting Stroke Time (Opn to Cls)	Tested once quarterly
									2MISV5233 - Fast Acting Stroke Time (Opn to Cls)	Tested every refueling outage
									2MISV5233 - Position Indicator (Closed)	Tested every refueling outage
									2MISV5233 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MIMV6470		MA	Category A		Yes	2			2MIMV6470 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MIMV6471		MA	Category A		Yes	2			2MIMV6471 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MIMV6480		MA	Category A		Yes	2			2MIMV6480 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MIMV6481		MA	Category A		Yes	2			2MIMV6481 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MIMV6490		MA	Category A		Yes	2			2MIMV6490 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B
2MIMV6491		MA	Category A		Yes	2			2MIMV6491 - Leak Test - Appendix J (Reverse Direc	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

NB - BORON RECYCLE SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NB103	CN -1556-01.03	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1NB260B	CN -1556-02.00	ML	Category A		Yes	2			1NB260B - Stroke Time (Open to Closed)	Tested once quarterly
									1NB260B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NB262	CN -1556-02.00	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NB331	CN -1556-02.00	SA	Category C		Yes	3			1NB331 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NB260B	CN -2556-02.00	ML	Category A		Yes	2			2NB260B - Stroke Time (Open to Closed)	Tested once quarterly
									2NB260B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NB260B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NB262	CN -2556-02.00	SA	Category AC		Yes	2			2NB262 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
2NB331	CN -2556-02.00	SA	Category C		Yes	3			2NB331 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NC31B	CN -1553-01.01	ML	Category B		Yes	1			1NC31B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1NC32B	CN -1553-01.01	AO	Category B		Yes	1		CN-nc02	1NC32B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NC32B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NC32B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC32B - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
1NC33A	CN -1553-01.01	ML	Category B		Yes	1			1NC33A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1NC34A	CN -1553-01.01	AO	Category B		Yes	1		CN-nc02	1NC34A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NC34A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NC34A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC34A - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
1NC35B	CN -1553-01.01	ML	Category B		Yes	1			1NC35B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1NC36B	CN -1553-01.01	AO	Category B		Yes	1		CN-nc02	1NC36B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NC36B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NC36B - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									1NC36B - Stroke Time (Open to Closed)	Tested at cold shutdown
1NC53B	CN -1553-01.01	ML	Category A		Yes	2			1NC53B - Stroke Time (Open to Closed)	Tested once quarterly
									1NC53B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to	Tested every refueling

CATAWBA NUCLEAR STAT

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Closed)	outage
									Position Indicator (Closed)	Tested once every two years
1NC54A	CN -1553-01.01	ML	Category A		Yes	2			1NC54A - Stroke Time (Open to Closed)	Tested once quarterly
									1NC54A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NC56B	CN -1553-01.01	MR	Category B		Yes	2			1NC56B - Stroke Time (Open to Closed)	Tested once quarterly
									1NC56B - Leak Test Using NW System	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NC57	CN -1553-01.01	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NC141	CN -1553-01.03	MA	Category A		Yes	2			1NC141 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NC142	CN -1553-01.03	MA	Category A		Yes	2			1NC142 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NC195B	CN -1553-01.03	MR	Category A		Yes	2			1NC195B - Stroke Time (Open to Closed)	Tested once quarterly
									1NC195B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NC196A	CN -1553-01.03	MR	Category A		Yes	2			1NC196A - Stroke Time (Open to Closed)	Tested once quarterly
									1NC196A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NC250A	CN -1553-01.01	ML	Category B		Yes	1		CN-nc03	1NC250A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1NC251B	CN -1553-01.01	ML	Category B		Yes	1		CN-nc03	1NC251B - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1NC252B	CN -1553-01.01	ML	Category B		Yes	1		CN-nc03	1NC252B - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1NC253A	CN -1553-01.01	ML	Category B		Yes	1		CN-nc03	1NC253A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2NC31B	CN -2553-01.01	ML	Category B		Yes	1			2NC31B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2NC32B	CN -2553-01.01	AO	Category B		Yes	1		CN-nc02	2NC32B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NC32B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC32B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC32B - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
2NC33A	CN -2553-01.01	ML	Category B		Yes	1			2NC33A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2NC34A	CN -2553-01.01	AO	Category B		Yes	1		CN-nc02	2NC34A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NC34A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC34A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC34A - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
2NC35B	CN -2553-01.01	ML	Category B		Yes	1			2NC35B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NC36B	CN -2553-01.01	AO	Category B		Yes	1		CN-nc02	2NC36B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NC36B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC36B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NC36B - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
2NC53B	CN -2553-01.01	ML	Category A		Yes	2			2NC53B - Stroke Time (Open to Closed)	Tested once quarterly
									2NC53B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC53B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NC54A	CN -2553-01.01	ML	Category A		Yes	2			2NC54A - Stroke Time (Open to Closed)	Tested once quarterly
									2NC54A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC54A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NC56B	CN -2553-01.01	MR	Category B		Yes	2			2NC56B - Stroke Time (Open to Closed)	Tested once quarterly
									2NC56B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC56B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NC57	CN -2553-01.01	SA	Category AC		Yes	2			2NC57 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NC141	CN -2553-01.03	MA	Category A		Yes	2			2NC141 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
2NC142	CN -2553-01.03	MA	Category A		Yes	2			2NC142 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
2NC195B	CN -2553-01.03	MR	Category A		Yes	2			2NC195B - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

NC - REACTOR COOLANT SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NC195B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC195B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NC196A	CN -2553-01.03	MR	Category A		Yes	2			2NC196A - Stroke Time (Open to Closed)	Tested once quarterly
									2NC196A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NC196A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NC250A	CN -2553-01.01	ML	Category B		Yes	1		CN-nc03	2NC250A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2NC251B	CN -2553-01.01	ML	Category B		Yes	1		CN-nc03	2NC251B - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2NC252B	CN -2553-01.01	ML	Category B		Yes	1		CN-nc03	2NC252B - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2NC253A	CN -2553-01.01	ML	Category B		Yes	1		CN-nc03	2NC253A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1ND1B	CN -1561-01.00	MR	Category A		Yes	1		CN-nd01	1ND1B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND1B - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1ND2A	CN -1561-01.00	MR	Category A		Yes	1		CN-nd01	1ND2A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND2A - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1ND3	CN -1561-01.00	SA	Category C		Yes	2			1ND3 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1ND10	CN -1561-01.00	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1ND25A	CN -1561-01.00	ML	Category B		Yes	2			1ND25A - Position Indicator (Open)	Tested once every two years
									1ND25A - Position Indicator (Closed)	Tested once every two years
									1ND25A - Stroke Time (Open to Closed)	Tested once quarterly
									1ND25A - Stroke Time (Closed to Open)	Tested once quarterly
1ND26	CN -1561-01.00	AO	Category B		Yes	2			1ND26 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
1ND27	CN -1561-01.00	AO	Category B		Yes	2			1ND27 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1ND28A	CN -1561-01.00	MR	Category B		Yes	2		CN-nd05	1ND28A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1ND31	CN -1561-01.00	SA	Category C		Yes	2			1ND31 - Relief Valve	Test relief valve per OM-

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Test (Closed to Open)	1 schedule
1ND32A	CN -1561-01.00	MR	Category B		Yes	2		CN-nd04	1ND32A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1ND32A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND32A - Position Indicator (Open)	Tested once every two years
									1ND32A - Position Indicator (Closed)	Tested once every two years
1ND35	CN -1561-01.00	SA	Category C		Yes	2			1ND35 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1ND36B	CN -1561-01.01	MR	Category A		Yes	1		CN-nd02	1ND36B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND36B - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1ND37A	CN -1561-01.01	MR	Category A		Yes	1		CN-nd02	1ND37A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND37A - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1ND38	CN -1561-01.01	SA	Category C		Yes	2			1ND38 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1ND44	CN -1561-01.01	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1ND59B	CN -1561-01.01	ML	Category B		Yes	2			1ND59B - Stroke Time (Open to Closed)	Tested once quarterly
									1ND59B - Stroke Time (Closed to Open)	Tested once quarterly
									1ND59B - Position Indicator (Open)	Tested once every two years
									1ND59B - Position Indicator (Closed)	Tested once every two years
1ND60	CN -1561-01.01	AO	Category B		Yes	2			1ND60 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
1ND61	CN -1561-01.01	AO	Category B		Yes	2			1ND61 - Failed to Safe Pos and Timed (Opn to	Tested once quarterly

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Cls)	
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1ND64	CN -1561-01.01	SA	Category C		Yes	2			1ND64 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1ND65B	CN -1561-01.01	MR	Category B		Yes	2		CN-nd04	1ND65B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1ND65B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1ND65B - Position Indicator (Open)	Tested once every two years
									1ND65B - Position Indicator (Closed)	Tested once every two years
1ND116	CN -1561-01.00	SA	Category C		Yes	2			1ND116 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1ND117	CN -1561-01.01	SA	Category C		Yes	2			1ND117 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2ND1B	CN -2561-01.00	MR	Category A		Yes	1		CN-nd01	2ND1B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND1B - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2ND2A	CN -2561-01.00	MR	Category A		Yes	1		CN-nd01	2ND2A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND2A - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2ND3	CN -2561-01.00	SA	Category C		Yes	2			2ND3 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2ND10	CN -2561-01.00	SA	Category C		Yes	2			2ND10 - Full Stroke (Closed)	Condition Monitoring
									2ND10 - Full Stroke (Open)	Condition Monitoring
2ND25A	CN -2561-01.00	ML	Category B		Yes	2			2ND25A - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2ND25A - Stroke Time (Closed to Open)	Tested once quarterly
									2ND25A - Position Indicator (Open)	Tested once every two years
									2ND25A - Position Indicator (Closed)	Tested once every two years
2ND26	CN -2561-01.00	AO	Category B		Yes	2			2ND26 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
2ND27	CN -2561-01.00	AO	Category B		Yes	2			2ND27 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2ND28A	CN -2561-01.00	MR	Category B		Yes	2		CN-nd05	2ND28A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2ND31	CN -2561-01.00	SA	Category C		Yes	2			2ND31 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2ND32A	CN -2561-01.00	MR	Category B		Yes	2		CN-nd04	2ND32A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2ND32A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND32A - Position Indicator (Open)	Tested once every two years
									2ND32A - Position Indicator (Closed)	Tested once every two years
2ND35	CN -2561-01.00	SA	Category C		Yes	2			2ND35 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2ND36B	CN -2561-01.01	MR	Category A		Yes	1		CN-nd02	2ND36B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND36B - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2ND37A	CN -2561-01.01	MR	Category A		Yes	1		CN-nd02	2ND37A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND37A - Leak Test -	Tested at cold shutdown

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Section XI (Accident Direct)	
									Position Indicator (Open)	Tested once every two years
2ND38	CN -2561-01.01	SA	Category C		Yes	2			2ND38 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2ND44	CN -2561-01.01	SA	Category C		Yes	2			2ND44 - Full Stroke (Closed)	Condition Monitoring
									2ND44 - Full Stroke (Open)	Condition Monitoring
2ND59B	CN -2561-01.01	ML	Category B		Yes	2			2ND59B - Stroke Time (Open to Closed)	Tested once quarterly
									2ND59B - Stroke Time (Closed to Open)	Tested once quarterly
									2ND59B - Position Indicator (Open)	Tested once every two years
									2ND59B - Position Indicator (Closed)	Tested once every two years
2ND60	CN -2561-01.01	AO	Category B		Yes	2			2ND60 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
2ND61	CN -2561-01.01	AO	Category B		Yes	2			2ND61 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2ND64	CN -2561-01.01	SA	Category C		Yes	2			2ND64 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2ND65B	CN -2561-01.01	MR	Category B		Yes	2		CN-nd04	2ND65B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2ND65B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2ND65B - Position Indicator (Open)	Tested once every two years
									2ND65B - Position Indicator (Closed)	Tested once every two years
2ND116	CN -2561-01.00	SA	Category C		Yes	2			2ND116 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Closed)	Condition Monitoring

CATAWBA NUCLEAR STAT

ND - RESIDUAL HEAT REMOVAL SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Open)	Condition Monitoring
2ND117	CN -2561-01.01	SA	Category C		Yes	2			2ND117 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NF - ICE CONDENSER REFRIGERATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NF228A	CN -1558-02.00	AO	Category A		Yes	2			1NF228A - Failed to Safe Pos and Timed (Opn to Cls	Tested once quarterly
									1NF228A - Failed to Safe Pos and Timed (Opn to Cls	Tested every refueling outage
									1NF228A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NF229	CN -1558-02.00	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NF233B	CN -1558-02.00	MR	Category A		Yes	2			1NF233B - Stroke Time (Open to Closed)	Tested once quarterly
									1NF233B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NF233B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NF234A	CN -1558-02.00	AO	Category A		Yes	2			1NF234A - Failed to Safe Pos and Timed (Opn to Cls	Tested once quarterly
									1NF234A - Failed to Safe Pos and Timed (Opn to Cls	Tested every refueling outage
									1NF234A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NF235	CN -1558-02.00	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NF895	CN -1558-02.06	SA	Category C		Yes	3			1NF895 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NF228A	CN -2558-02.00	AO	Category A		Yes	2			2NF228A - Failed to Safe Pos and Timed (Opn to Cls	Tested once quarterly
									2NF228A - Failed to Safe Pos and Timed (Opn to Cls	Tested every refueling outage
									2NF228A - Leak Test - Appendix J (Accident	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

NF - ICE CONDENSER REFRIGERATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Direct)	
									Position Indicator (Closed)	Tested once every two years
2NF229	CN -2558-02.00	SA	Category AC		Yes	2			2NF229 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NF233B	CN -2558-02.00	MR	Category A		Yes	2			2NF233B - Stroke Time (Open to Closed)	Tested once quarterly
									2NF233B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NF233B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NF234A	CN -2558-02.00	AO	Category A		Yes	2			2NF234A - Failed to Safe Pos and Timed (Opn to Cls	Tested once quarterly
									2NF234A - Failed to Safe Pos and Timed (Opn to Cls	Tested every refueling outage
									2NF234A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NF235	CN -2558-02.00	SA	Category AC		Yes	2			2NF235 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NF895	CN -2558-02.06	SA	Category C		Yes	3			2NF895 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI9A	CN -1562-01.00	MR	Category B		Yes	2		CN-ni01	1NI9A - Stroke Time (Closed to Open)	Tested every refueling outage
									1NI9A - Position Indicator (Closed)	Tested once every two years
									1NI9A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI9A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI9A - Position Indicator (Open)	Tested once every two years
1NI10B	CN -1562-01.00	MR	Category B		Yes	2		CN-ni01	1NI10B - Position Indicator (Closed)	Tested once every two years
									1NI10B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI10B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI10B - Position Indicator (Open)	Tested once every two years
									1NI10B - Stroke Time (Closed to Open)	Tested every refueling outage
1NI12	CN -1562-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NI12 - Full Stroke (Open)	Condition Monitoring
1NI15	CN -1562-01.00	SA	Category C		Yes	1			Full Stroke (Closed)	Condition Monitoring
									1NI15 - Full Stroke (Open)	Condition Monitoring
1NI17	CN -1562-01.00	SA	Category C		Yes	1			Full Stroke (Closed)	Condition Monitoring
									1NI17 - Full Stroke (Open)	Condition Monitoring
1NI19	CN -1562-01.00	SA	Category C		Yes	1			Full Stroke (Closed)	Condition Monitoring
									1NI19 - Full Stroke (Open)	Condition Monitoring
1NI21	CN -1562-01.00	SA	Category C		Yes	1			Full Stroke (Closed)	Condition Monitoring
									1NI21 - Full Stroke (Open)	Condition Monitoring
1NI47A	CN -1562-01.01	ML	Category A		Yes	2			Position Indicator (Closed)	Tested once every two years
									1NI47A - Stroke Time (Open to Closed)	Tested once quarterly
									1NI47A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NI47A - Leak Test - Appendix J (Accident	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Direct)	
1NI48	CN -1562-01.01	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NI52	CN -1562-01.01	SA	Category C		Yes	2			1NI52 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI54A	CN -1562-01.01	ML	Category B		Yes	1		CN-NI25	1NI54A - Position Indicator (Closed)	Tested once every two years
									1NI54A - Stroke Time (Open to Closed)	Tested every refueling outage
1NI59	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI59 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI60	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI60 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI63	CN -1562-01.01	SA	Category C		Yes	2			1NI63 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI65B	CN -1562-01.01	ML	Category B		Yes	1		CN-NI25	1NI65B - Position Indicator (Closed)	Tested once every two years
									1NI65B - Stroke Time (Open to Closed)	Tested every refueling outage
1NI70	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI70 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI71	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI71 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI74	CN -1562-01.01	SA	Category C		Yes	2			1NI74 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI76A	CN -1562-01.01	ML	Category B		Yes	1		CN-NI25	1NI76A - Position Indicator (Closed)	Tested once every two years
									1NI76A - Stroke Time (Open to Closed)	Tested every refueling outage
1NI81	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
									1NI81 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI82	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI82 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI86	CN -1562-01.01	SA	Category C		Yes	2			1NI86 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI88B	CN -1562-01.01	ML	Category B		Yes	1		CN-NI25	1NI88B - Position Indicator (Closed)	Tested once every two years
									1NI88B - Stroke Time (Open to Closed)	Tested every refueling outage
1NI93	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI93 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI94	CN -1562-01.01	SA	Category AC		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
									1NI94 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI95A	CN -1562-01.01	MR	Category A		Yes	2			1NI95A - Stroke Time (Open to Closed)	Tested once quarterly
									1NI95A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NI95A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NI96B	CN -1562-01.01	ML	Category A		Yes	2			Position Indicator (Closed)	Tested once every two years
									1NI96B - Stroke Time (Open to Closed)	Tested once quarterly
									1NI96B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NI96B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NI100B	CN -1562-01.02	MR	Category B		Yes	2		CN-ni08	Position Indicator	Tested once every two

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Closed)	years
									1NI100B - Stroke Time (Open to Closed)	Tested at cold shutdown
1NI101	CN -1562-01.02	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1NI102	CN -1562-01.02	SA	Category C		Yes	2			1NI102 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI103A	CN -1562-01.02	MR	Category B		Yes	2		CN-ni-24	1NI103A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1NI114	CN -1562-01.02	SA	Category C		Yes	2			1NI114 - Full Stroke (Closed)	Condition Monitoring
									1NI114 - Full Stroke (Open)	Condition Monitoring
1NI115A	CN -1562-01.02	ML	Category B		Yes	2			1NI115A - Stroke Time (Open to Closed)	Tested once quarterly
									1NI115A - Stroke Time (Closed to Open)	Tested once quarterly
									1NI115A - Position Indicator (Open)	Tested once every two years
									1NI115A - Position Indicator (Closed)	Tested once every two years
1NI116	CN -1562-01.02	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI118A	CN -1562-01.02	MR	Category B		Yes	2			1NI118A - Stroke Time (Open to Closed)	Tested once quarterly
									1NI118A - Stroke Time (Closed to Open)	Tested once quarterly
									1NI118A - Position Indicator (Open)	Tested once every two years
									1NI118A - Position Indicator (Closed)	Tested once every two years
1NI119	CN -1562-01.02	SA	Category C		Yes	2			1NI119 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI120B	CN -1562-01.02	ML	Category A		Yes	2			1NI120B - Stroke Time (Open to Closed)	Tested once quarterly
									1NI120B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NI120B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NI121A	CN -1562-01.02	MR	Category B		Yes	2		CN-ni21	1NI121A - Stroke Time (Open to Closed)	Tested at cold shutdown

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NI121A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI121A - Position Indicator (Open)	Tested once every two years
									1NI121A - Position Indicator (Closed)	Tested once every two years
1NI122B	CN -1562-01.02	ML	Category B		Yes	2			1NI122B - Stroke Time (Open to Closed)	Tested once quarterly
									1NI122B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NI124	CN -1562-01.02	SA	Category AC		Yes	1			1NI124 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI124 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI125	CN -1562-01.02	SA	Category AC		Yes	1			1NI125 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI125 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI126	CN -1562-01.02	SA	Category AC		Yes	1			1NI126 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI126 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI128	CN -1562-01.02	SA	Category AC		Yes	1			1NI128 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI128 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI129	CN -1562-01.02	SA	Category AC		Yes	1			1NI129 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI129 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI134	CN -1562-01.02	SA	Category AC		Yes	1			1NI134 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI134 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI135B	CN -1562-01.02	MR	Category B		Yes	2			1NI135B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1NI136B	CN -1562-01.02	MR	Category B		Yes	2	.	CN-ni19	1NI136B - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
1NI143	CN -1562-01.02	SA	Category C		Yes	2			1NI143 - Full Stroke (Closed)	Condition Monitoring
									1NI143 - Full Stroke (Open)	Condition Monitoring
1NI144A	CN -1562-01.02	ML	Category B		Yes	2		CN-ni22	1NI144A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI144A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI144A - Position Indicator (Open)	Tested once every two years
									1NI144A - Position Indicator (Closed)	Tested once every two years
1NI147B	CN -1562-01.02	ML	Category B		Yes	2		CN-ni09	1NI147B - Stroke Time (Open to Closed)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
1NI148	CN -1562-01.02	SA	Category C		Yes	2			1NI148 - Full Stroke (Closed)	Condition Monitoring
									1NI148 - Full Stroke (Open)	Condition Monitoring
1NI150B	CN -1562-01.02	MR	Category B		Yes	2			1NI150B - Stroke Time (Open to Closed)	Tested once quarterly
									1NI150B - Stroke Time (Closed to Open)	Tested once quarterly
									1NI150B - Position Indicator (Open)	Tested once every two years
									1NI150B - Position Indicator (Closed)	Tested once every two years
1NI151	CN -1562-01.02	SA	Category C		Yes	2			1NI151 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI152B	CN -1562-01.02	MR	Category B		Yes	2		CN-ni21	1NI152B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI152B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI152B - Position Indicator (Open)	Tested once every two years
									1NI152B - Position Indicator (Closed)	Tested once every two years
1NI153A	CN -1562-01.02	ML	Category B		Yes	2			1NI153A - Stroke Time (Open to Closed)	Tested once quarterly

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NI153A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NI154B	CN -1562-01.02	ML	Category B		Yes	2			1NI154B - Stroke Time (Open to Closed)	Tested once quarterly
									1NI154B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NI156	CN -1562-01.02	SA	Category AC		Yes	1			1NI156 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI156 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI157	CN -1562-01.02	SA	Category AC		Yes	1			1NI157 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI157 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI159	CN -1562-01.02	SA	Category AC		Yes	1			1NI159 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI159 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI160	CN -1562-01.02	SA	Category AC		Yes	1			1NI160 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI160 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI161	CN -1562-01.03	SA	Category C		Yes	2			1NI161 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI162A	CN -1562-01.03	MR	Category B		Yes	2		CN-ni12	1NI162A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI162A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NI165	CN -1562-01.03	SA	Category AC		Yes	1			1NI165 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI165 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring

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NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI167	CN -1562-01.03	SA	Category AC		Yes	1			1NI167 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI167 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI169	CN -1562-01.03	SA	Category AC		Yes	1			1NI169 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI169 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI171	CN -1562-01.03	SA	Category AC		Yes	1			1NI171 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									1NI171 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI173A	CN -1562-01.03	MR	Category B		Yes	2		CN-ni15	1NI173A - Leak Test Using NW System	Tested every refueling outage
									1NI173A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI173A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI173A - Position Indicator (Open)	Tested once every two years
									1NI173A - Position Indicator (Closed)	Tested once every two years
1NI175	CN -1562-01.03	SA	Category AC		Yes	1			1NI175 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI176	CN -1562-01.03	SA	Category AC		Yes	1			1NI176 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI178B	CN -1562-01.03	MR	Category B		Yes	2		CN-ni15	1NI178B - Leak Test Using NW System	Tested every refueling outage
									1NI178B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI178B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI178B - Position Indicator (Open)	Tested once every two years
									1NI178B - Position Indicator (Closed)	Tested once every two years

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NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI180	CN -1562-01.03	SA	Category AC		Yes	1			1NI180 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI181	CN -1562-01.03	SA	Category AC		Yes	1			1NI181 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI183B	CN -1562-01.02	ML	Category B		Yes	2		CN-ni16	1NI183B - Leak Test Using NW System	Tested every refueling outage
									1NI183B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI183B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI183B - Position Indicator (Open)	Tested once every two years
									1NI183B - Position Indicator (Closed)	Tested once every two years
1NI184B	CN -1562-01.03	MR	Category B		Yes	2		CN-ni17	1NI184B - Stroke Time (Closed to Open)	Tested every refueling outage
									1NI184B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI184B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI184B - Position Indicator (Open)	Tested once every two years
									1NI184B - Position Indicator (Closed)	Tested once every two years
1NI185A	CN -1562-01.03	MR	Category B		Yes	2		CN-ni17	1NI185A - Stroke Time (Closed to Open)	Tested every refueling outage
									1NI185A - Position Indicator (Closed)	Tested once every two years
									1NI185A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI185A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI185A - Position Indicator (Open)	Tested once every two years
1NI332A	CN -1562-01.02	MR	Category B		Yes	2		CN-ni18	1NI332A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI332A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI332A - Position Indicator (Open)	Tested once every two years
									1NI332A - Position Indicator (Closed)	Tested once every two years

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NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NI333B	CN -1562-01.02	MR	Category B		Yes	2		CN-ni18	1NI333B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI333B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI333B - Position Indicator (Open)	Tested once every two years
									1NI333B - Position Indicator (Closed)	Tested once every two years
1NI334B	CN -1562-01.02	MR	Category B		Yes	2		CN-ni23	1NI334B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NI334B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NI334B - Position Indicator (Open)	Tested once every two years
									1NI334B - Position Indicator (Closed)	Tested once every two years
1NI342	CN -1562-01.02	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NI351	CN -1562-01.00	SA	Category C		Yes	1			1NI351 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NI352	CN -1562-01.00	SA	Category C		Yes	1			1NI352 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NI353	CN -1562-01.00	SA	Category C		Yes	1			1NI353 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NI354	CN -1562-01.00	SA	Category C		Yes	1			1NI354 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NI391	CN -1562-01.01	AO	Category A		Yes	2			1NI391 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI392	CN -1562-01.01	AO	Category A		Yes	2			1NI392 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI393	CN -1562-01.01	AO	Category A		Yes	2			1NI393 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI394	CN -1562-01.01	AO	Category A		Yes	2			1NI394 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI395	CN -1562-01.02	AO	Category A		Yes	2			1NI395 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI396	CN -1562-01.02	AO	Category A		Yes	2			1NI396 - Leak Test - Section XI (Accident	Tested at cold shutdown

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Direct)	
1NI397	CN -1562-01.02	AO	Category A		Yes	2			1NI397 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI398	CN -1562-01.02	AO	Category A		Yes	2			1NI398 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
1NI438A	CN -1562-01.01	ML	Category B		Yes	2			1NI438A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1NI439B	CN -1562-01.01	ML	Category B		Yes	2			1NI439B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1NI471	CN -1562-01.01	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NI481	CN -1562-01.01	SA	Category C		Yes	3			1NI481 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NI485	CN -1562-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NI495	CN -1562-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NI501	CN -1562-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2NI9A	CN -2562-01.00	MR	Category B		Yes	2		CN-ni01	2NI9A - Stroke Time (Closed to Open)	Tested every refueling outage
									2NI9A - Position Indicator (Closed)	Tested once every two years
									2NI9A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI9A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI9A - Position Indicator (Open)	Tested once every two years
2NI10B	CN -2562-01.00	MR	Category B		Yes	2		CN-ni01	2NI10B - Stroke Time (Closed to Open)	Tested every refueling outage
									2NI10B - Position Indicator (Closed)	Tested once every two years
									2NI10B - Stroke Time	Tested at cold shutdown

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)	
									2NI10B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI10B - Position Indicator (Open)	Tested once every two years
2NI12	CN -2562-01.00	SA	Category C		Yes	2			2NI12 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI15	CN -2562-01.00	SA	Category C		Yes	1			2NI15 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI17	CN -2562-01.00	SA	Category C		Yes	1			2NI17 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI19	CN -2562-01.00	SA	Category C		Yes	1			2NI19 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI21	CN -2562-01.00	SA	Category C		Yes	1			2NI21 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI47A	CN -2562-01.01	ML	Category A		Yes	2			2NI47A - Stroke Time (Open to Closed)	Tested once quarterly
									2NI47A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI47A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NI48	CN -2562-01.01	SA	Category AC		Yes	2			2NI48 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NI52	CN -2562-01.01	SA	Category C		Yes	2			2NI52 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI54A	CN -2562-01.01	ML	Category B		Yes	1		CN-NI25	2NI54A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI54A - Position Indicator (Closed)	Tested once every two years
2NI59	CN -2562-01.01	SA	Category AC		Yes	1			2NI59 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NI60	CN -2562-01.01	SA	Category AC		Yes	1			2NI60 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Closed)	Condition Monitoring

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Open)	Condition Monitoring
2NI63	CN -2562-01.01	SA	Category C		Yes	2			2NI63 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI65B	CN -2562-01.01	ML	Category B		Yes	1		CN-NI25	2NI65B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI65B - Position Indicator (Closed)	Tested once every two years
2NI70	CN -2562-01.01	SA	Category AC		Yes	1			2NI70 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI70 - Full Stroke (Open)	Condition Monitoring
									2NI70 - Full Stroke (Closed)	Condition Monitoring
2NI71	CN -2562-01.01	SA	Category AC		Yes	1			2NI71 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI71 - Full Stroke (Open)	Condition Monitoring
									2NI71 - Full Stroke (Closed)	Condition Monitoring
2NI74	CN -2562-01.01	SA	Category C		Yes	2			2NI74 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI76A	CN -2562-01.01	ML	Category B		Yes	1		CN-NI25	2NI76A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI76A - Position Indicator (Closed)	Tested once every two years
2NI81	CN -2562-01.01	SA	Category AC		Yes	1			2NI81 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI81 - Full Stroke (Open)	Condition Monitoring
									2NI81 - Full Stroke (Closed)	Condition Monitoring
2NI82	CN -2562-01.01	SA	Category AC		Yes	1			2NI82 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI82 - Full Stroke (Open)	Condition Monitoring
									2NI82 - Full Stroke (Closed)	Condition Monitoring
2NI86	CN -2562-01.01	SA	Category C		Yes	2			2NI86 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI88B	CN -2562-01.01	ML	Category B		Yes	1		CN-NI25	2NI88B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI88B - Position Indicator (Closed)	Tested once every two years
2NI93	CN -2562-01.01	SA	Category AC		Yes	1			2NI93 - Leak Test -	Tested at cold shutdown

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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 Direct)	
									2NI93 - Full Stroke (Open)	Condition Monitoring
									2NI93 - Full Stroke (Closed)	Condition Monitoring
2NI94	CN -2562-01.01	SA	Category AC		Yes	1			2NI94 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI94 - Full Stroke (Open)	Condition Monitoring
									2NI94 - Full Stroke (Closed)	Condition Monitoring
2NI95A	CN -2562-01.01	MR	Category A		Yes	2			2NI95A - Stroke Time (Open to Closed)	Tested once quarterly
									2NI95A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI95A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NI96B	CN -2562-01.01	ML	Category A		Yes	2			2NI96B - Stroke Time (Open to Closed)	Tested once quarterly
									2NI96B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI96B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NI100B	CN -2562-01.02	MR	Category B		Yes	2		CN-ni08	2NI100B - Stroke Time (Open to Closed)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
2NI101	CN -2562-01.02	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NI102	CN -2562-01.02	SA	Category C		Yes	2			2NI102 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI103A	CN -2562-01.02	MR	Category B		Yes	2		CN-ni-24	2NI103A - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2NI114	CN -2562-01.02	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NI115A	CN -2562-01.02	ML	Category B		Yes	2			2NI115A - Stroke Time	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open to Closed)	
									2NI115A - Stroke Time (Closed to Open)	Tested once quarterly
									2NI115A - Position Indicator (Open)	Tested once every two years
									2NI115A - Position Indicator (Closed)	Tested once every two years
2NI116	CN -2562-01.02	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI118A	CN -2562-01.02	MR	Category B		Yes	2			2NI118A - Stroke Time (Open to Closed)	Tested once quarterly
									2NI118A - Stroke Time (Closed to Open)	Tested once quarterly
									2NI118A - Position Indicator (Open)	Tested once every two years
									2NI118A - Position Indicator (Closed)	Tested once every two years
2NI119	CN -2562-01.02	SA	Category C		Yes	2			2NI119 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI120B	CN -2562-01.02	ML	Category A		Yes	2			2NI120B - Stroke Time (Open to Closed)	Tested once quarterly
									2NI120B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI120B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NI121A	CN -2562-01.02	MR	Category B		Yes	2		CN-ni21	2NI121A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI121A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI121A - Position Indicator (Open)	Tested once every two years
									2NI121A - Position Indicator (Closed)	Tested once every two years
2NI122B	CN -2562-01.02	ML	Category B		Yes	2			2NI122B - Stroke Time (Open to Closed)	Tested once quarterly
									2NI122B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NI122B - Position Indicator (Open)	Tested once every two years
2NI124	CN -2562-01.02	SA	Category AC		Yes	1			2NI124 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI124 - Full Stroke (Open)	Tested every refueling outage

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
2NI125	CN -2562-01.02	SA	Category AC		Yes	1			2NI125 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI126	CN -2562-01.02	SA	Category AC		Yes	1			2NI126 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI128	CN -2562-01.02	SA	Category AC		Yes	1			2NI128 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI129	CN -2562-01.02	SA	Category AC		Yes	1			2NI129 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI134	CN -2562-01.02	SA	Category AC		Yes	1			2NI134 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI135B	CN -2562-01.02	MR	Category B		Yes	2			2NI135B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2NI136B	CN -2562-01.02	MR	Category B		Yes	2		CN-ni19	2NI136B - Stroke Time (Closed to Open)	Tested at cold shutdown
									Position Indicator (Open)	Tested once every two years
2NI143	CN -2562-01.02	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI144A	CN -2562-01.02	ML	Category B		Yes	2		CN-ni22	2NI144A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI144A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI144A - Position Indicator (Open)	Tested once every two years
									2NI144A - Position Indicator (Closed)	Tested once every two years
2NI147B	CN -2562-01.02	ML	Category B		Yes	2		CN-ni09	2NI147B - Stroke Time (Open to Closed)	Tested at cold shutdown
									Position Indicator	Tested once every two

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Closed)	years
2NI148	CN -2562-01.02	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NI150B	CN -2562-01.02	MR	Category B		Yes	2			2NI150B - Stroke Time (Open to Closed)	Tested once quarterly
									2NI150B - Stroke Time (Closed to Open)	Tested once quarterly
									2NI150B - Position Indicator (Open)	Tested once every two years
									2NI150B - Position Indicator (Closed)	Tested once every two years
2NI151	CN -2562-01.02	SA	Category C		Yes	2			2NI151 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI152B	CN -2562-01.02	MR	Category B		Yes	2		CN-ni21	2NI152B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI152B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI152B - Position Indicator (Open)	Tested once every two years
									2NI152B - Position Indicator (Closed)	Tested once every two years
2NI153A	CN -2562-01.02	ML	Category B		Yes	2			2NI153A - Stroke Time (Open to Closed)	Tested once quarterly
									2NI153A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NI154B	CN -2562-01.02	ML	Category B		Yes	2			2NI154B - Stroke Time (Open to Closed)	Tested once quarterly
									2NI154B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NI156	CN -2562-01.02	SA	Category AC		Yes	1			2NI156 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI157	CN -2562-01.02	SA	Category AC		Yes	1			2NI157 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI159	CN -2562-01.02	SA	Category AC		Yes	1			2NI159 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
2NI160	CN -2562-01.02	SA	Category AC		Yes	1			2NI160 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI161	CN -2562-01.03	SA	Category C		Yes	2			2NI161 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI162A	CN -2562-01.03	MR	Category B		Yes	2		CN-ni12	2NI162A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI162A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NI165	CN -2562-01.03	SA	Category AC		Yes	1			2NI165 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI167	CN -2562-01.03	SA	Category AC		Yes	1			2NI167 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI169	CN -2562-01.03	SA	Category AC		Yes	1			2NI169 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI171	CN -2562-01.03	SA	Category AC		Yes	1			2NI171 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI171 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NI173A	CN -2562-01.03	MR	Category B		Yes	2		CN-ni15	2NI173A - Leak Test Using NW System	Tested every refueling outage
									2NI173A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI173A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI173A - Position Indicator (Open)	Tested once every two years
									2NI173A - Position Indicator (Closed)	Tested once every two years
2NI175	CN -2562-01.03	SA	Category AC		Yes	1			2NI175 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NI175 - Full Stroke (Open)	Condition Monitoring
									2NI175 - Full Stroke (Closed)	Condition Monitoring
2NI176	CN -2562-01.03	SA	Category AC		Yes	1			2NI176 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI176 - Full Stroke (Open)	Condition Monitoring
									2NI176 - Full Stroke (Closed)	Condition Monitoring
2NI178B	CN -2562-01.03	MR	Category B		Yes	2		CN-ni15	2NI178B - Leak Test Using NW System	Tested every refueling outage
									2NI178B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI178B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI178B - Position Indicator (Open)	Tested once every two years
									2NI178B - Position Indicator (Closed)	Tested once every two years
2NI180	CN -2562-01.03	SA	Category AC		Yes	1			2NI180 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI180 - Full Stroke (Open)	Condition Monitoring
									2NI180 - Full Stroke (Closed)	Condition Monitoring
2NI181	CN -2562-01.03	SA	Category AC		Yes	1			2NI181 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
									2NI181 - Full Stroke (Open)	Condition Monitoring
									2NI181 - Full Stroke (Closed)	Condition Monitoring
2NI183B	CN -2562-01.02	ML	Category B		Yes	2		CN-ni16	2NI183B - Leak Test Using NW System	Tested every refueling outage
									2NI183B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI183B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI183B - Position Indicator (Open)	Tested once every two years
									2NI183B - Position Indicator (Closed)	Tested once every two years
2NI184B	CN -2562-01.03	MR	Category B		Yes	2		CN-ni17	2NI184B - Stroke Time (Closed to Open)	Tested every refueling outage
									2NI184B - Position	Tested once every two

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Closed)	years
									2NI184B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI184B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI184B - Position Indicator (Open)	Tested once every two years
2NI185A	CN -2562-01.03	MR	Category B		Yes	2		CN-ni17	2NI185A - Stroke Time (Closed to Open)	Tested every refueling outage
									2NI185A - Position Indicator (Closed)	Tested once every two years
									2NI185A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI185A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI185A - Position Indicator (Open)	Tested once every two years
2NI332A	CN -2562-01.02	MR	Category B		Yes	2		CN-ni18	2NI332A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI332A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI332A - Position Indicator (Open)	Tested once every two years
									2NI332A - Position Indicator (Closed)	Tested once every two years
2NI333B	CN -2562-01.02	MR	Category B		Yes	2		CN-ni18	2NI333B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI333B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI333B - Position Indicator (Open)	Tested once every two years
									2NI333B - Position Indicator (Closed)	Tested once every two years
2NI334B	CN -2562-01.02	MR	Category B		Yes	2		CN-ni23	2NI334B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NI334B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NI334B - Position Indicator (Open)	Tested once every two years
									2NI334B - Position Indicator (Closed)	Tested once every two years
2NI342	CN -2562-01.02	SA	Category C		Yes	2			2NI342 - Full Stroke (Open)	Condition Monitoring
									2NI342 - Full Stroke (Closed)	Condition Monitoring
2NI351	CN -2562-01.00	SA	Category C		Yes	1			2NI351 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NI352	CN -2562-01.00	SA	Category C		Yes	1			2NI352 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2NI353	CN -2562-01.00	SA	Category C		Yes	1			2NI353 - Full Stroke (Open)	Tested every refueling outage
									Full Stroke (Both)	Condition Monitoring
2NI354	CN -2562-01.00	SA	Category C		Yes	1			2NI354 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2NI391	CN -2562-01.01	AO	Category A		Yes	2			2NI391 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI392	CN -2562-01.01	AO	Category A		Yes	2			2NI392 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI393	CN -2562-01.01	AO	Category A		Yes	2			2NI393 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI394	CN -2562-01.01	AO	Category A		Yes	2			2NI394 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI395	CN -2562-01.02	AO	Category A		Yes	2			2NI395 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI396	CN -2562-01.02	AO	Category A		Yes	2			2NI396 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI397	CN -2562-01.02	AO	Category A		Yes	2			2NI397 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI398	CN -2562-01.02	AO	Category A		Yes	2			2NI398 - Leak Test - Section XI (Accident Direct)	Tested at cold shutdown
2NI438A	CN -2562-01.01	ML	Category B		Yes	2			2NI438A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2NI439B	CN -2562-01.01	ML	Category B		Yes	2			2NI439B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2NI471	CN -2562-01.01	SA	Category AC		Yes	2			2NI471 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NI481	CN -2562-01.01	SA	Category C		Yes	3			2NI481 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NI485	CN -2562-01.03	SA	Category AC		Yes	2			2NI485 - Leak Test -	10CFR50, App J, Opt B

NI - SAFETY INJECTION SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Appendix J (Accident Direct)	
									Full Stroke (Both)	Condition Monitoring
2NI495	CN -2562-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2NI501	CN -2562-01.03	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NM3A	CN -1572-01.00	ML	Category A		Yes	2			1NM3A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
									1NM3A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM3A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM6A	CN -1572-01.00	ML	Category A		Yes	2			Position Indicator (Closed)	Tested once every two years
									1NM6A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM6A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM6A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM7B	CN -1572-01.00	ML	Category A		Yes	2			Position Indicator (Closed)	Tested once every two years
									1NM7B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM7B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM7B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM22A	CN -1572-01.00	ML	Category A		Yes	2			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1NM22A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM22A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM25A	CN -1572-01.00	ML	Category A		Yes	2			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1NM25A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM25A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM26B	CN -1572-01.00	ML	Category A		Yes	2			Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two

CATAWBA NUCLEAR STAT

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
										years
									1NM26B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM26B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM69	CN -1572-01.01	SA	Category AC		Yes	2			1NM69 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
									1NM69 - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1NM72B	CN -1572-01.01	ML	Category A		Yes	2			Position Indicator (Closed)	Tested once every two years
									1NM72B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM72B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM72B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM75B	CN -1572-01.01	ML	Category A		Yes	2			Position Indicator (Closed)	Tested once every two years
									1NM75B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM75B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM75B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NM78B	CN -1572-01.01	ML	Category A		Yes	2			1NM78B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM78B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
									1NM78B - Stroke Time (Open to Closed)	Tested once quarterly
1NM81B	CN -1572-01.01	ML	Category A		Yes	2			1NM81B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM81B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM81B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NM82A	CN -1572-01.01	ML	Category A		Yes	2			1NM82A - Stroke Time	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open to Closed)	
									1NM82A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NM82A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NM187A	CN -1572-01.04	ML	Category B		Yes	2			1NM187A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM187A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM190A	CN -1572-01.04	ML	Category B		Yes	2			1NM190A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM190A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM191B	CN -1572-01.04	ML	Category B		Yes	2			1NM191B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM191B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM197B	CN -1572-01.04	ML	Category B		Yes	2			1NM197B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM197B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM200B	CN -1572-01.04	ML	Category B		Yes	2			1NM200B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM200B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM201A	CN -1572-01.04	ML	Category B		Yes	2			1NM201A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM201A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM207A	CN -1572-01.04	ML	Category B		Yes	2			1NM207A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM207A - Stroke Time (Open to Closed)	Tested every refueling outage

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Position Indicator (Closed)	Tested once every two years
1NM210A	CN -1572-01.04	ML	Category B		Yes	2			1NM210A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM210A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM211B	CN -1572-01.04	ML	Category B		Yes	2			1NM211B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM211B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM217B	CN -1572-01.04	ML	Category B		Yes	2			1NM217B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM217B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM220B	CN -1572-01.04	ML	Category B		Yes	2			1NM220B - Stroke Time (Open to Closed)	Tested once quarterly
									1NM220B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM221A	CN -1572-01.04	ML	Category B		Yes	2			1NM221A - Stroke Time (Open to Closed)	Tested once quarterly
									1NM221A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NM424	CN -1572-01.00	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
1NM425	CN -1572-01.00	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									Leak Test - Appendix J (Accident Direction)	10CFR50, App J, Opt B
2NM3A	CN -2572-01.00	ML	Category A		Yes	2			2NM3A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM3A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM3A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two

CATAWBA NUCLEAR STAT

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
										years
2NM6A	CN -2572-01.00	ML	Category A		Yes	2			2NM6A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM6A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM6A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM7B	CN -2572-01.00	ML	Category A		Yes	2			2NM7B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM7B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM7B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM22A	CN -2572-01.00	ML	Category A		Yes	2			2NM22A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM22A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM22A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM25A	CN -2572-01.00	ML	Category A		Yes	2			2NM25A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM25A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM25A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM26B	CN -2572-01.00	ML	Category A		Yes	2			2NM26B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM26B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM26B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM69	CN -2572-01.01	SA	Category AC		Yes	2			2NM69 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NM69 - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2NM72B	CN -2572-01.01	ML	Category A		Yes	2			2NM72B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM72B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM72B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM75B	CN -2572-01.01	ML	Category A		Yes	2			2NM75B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM75B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM75B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM78B	CN -2572-01.01	ML	Category A		Yes	2			2NM78B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM78B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM78B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM81B	CN -2572-01.01	ML	Category A		Yes	2			2NM81B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM81B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM81B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NM82A	CN -2572-01.01	ML	Category A		Yes	2			2NM82A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM82A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NM82A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NM187A	CN -2572-01.04	ML	Category B		Yes	2			2NM187A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM187A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM190A	CN -2572-01.04	ML	Category B		Yes	2			2NM190A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM190A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM191B	CN -2572-01.04	ML	Category B		Yes	2			2NM191B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM191B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM197B	CN -2572-01.04	ML	Category B		Yes	2			2NM197B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM197B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM200B	CN -2572-01.04	ML	Category B		Yes	2			2NM200B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM200B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM201A	CN -2572-01.04	ML	Category B		Yes	2			2NM201A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM201A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM207A	CN -2572-01.04	ML	Category B		Yes	2			2NM207A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM207A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM210A	CN -2572-01.04	ML	Category B		Yes	2			2NM210A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM210A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

NM - NUCLEAR SAMPLING SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NM211B	CN -2572-01.04	ML	Category B		Yes	2			2NM211B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM211B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM217B	CN -2572-01.04	ML	Category B		Yes	2			2NM217B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM217B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM220B	CN -2572-01.04	ML	Category B		Yes	2			2NM220B - Stroke Time (Open to Closed)	Tested once quarterly
									2NM220B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM221A	CN -2572-01.04	ML	Category B		Yes	2			2NM221A - Stroke Time (Open to Closed)	Tested once quarterly
									2NM221A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NM424	CN -2572-01.00	SA	Category AC		Yes	2			2NM424 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NM425	CN -2572-01.00	SA	Category AC		Yes	2			2NM425 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NS1B	CN -1563-01.00	MR	Category B		Yes	2			1NS1B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1NS2	CN -1563-01.00	SA	Category C		Yes	2			1NS2 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NS3B	CN -1563-01.00	MR	Category B		Yes	2			1NS3B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1NS4	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1NS12B	CN -1563-01.00	MR	Category B		Yes	2			1NS12B - Stroke Time (Open to Closed)	Tested once quarterly
									1NS12B - Stroke Time (Closed to Open)	Tested once quarterly
									1NS12B - Position Indicator (Open)	Tested once every two years
									1NS12B - Position Indicator (Closed)	Tested once every two years
									1NS12B - Leak Test Using NW System	Tested every refueling outage
1NS13	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NS15B	CN -1563-01.00	MR	Category B		Yes	2			1NS15B - Leak Test Using NW System	Tested every refueling outage
									1NS15B - Stroke Time (Open to Closed)	Tested once quarterly
									1NS15B - Stroke Time (Closed to Open)	Tested once quarterly
									1NS15B - Position Indicator (Open)	Tested once every two years
									1NS15B - Position Indicator (Closed)	Tested once every two years
1NS16	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NS18A	CN -1563-01.00	MR	Category B		Yes	2			1NS18A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1NS19	CN -1563-01.00	SA	Category C		Yes	2			1NS19 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NS20A	CN -1563-01.00	MR	Category B		Yes	2			1NS20A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1NS21	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Both)	Condition Monitoring
1NS29A	CN -1563-01.00	MR	Category B		Yes	2			1NS29A - Leak Test Using NW System	Tested every refueling outage
									1NS29A - Stroke Time (Open to Closed)	Tested once quarterly
									1NS29A - Stroke Time (Closed to Open)	Tested once quarterly
									1NS29A - Position Indicator (Open)	Tested once every two years
									1NS29A - Position Indicator (Closed)	Tested once every two years
1NS30	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NS32A	CN -1563-01.00	MR	Category B		Yes	2			1NS32A - Leak Test Using NW System	Tested every refueling outage
									1NS32A - Stroke Time (Open to Closed)	Tested once quarterly
									1NS32A - Stroke Time (Closed to Open)	Tested once quarterly
									1NS32A - Position Indicator (Open)	Tested once every two years
									1NS32A - Position Indicator (Closed)	Tested once every two years
1NS33	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NS38B	CN -1563-01.00	MR	Category B		Yes	2		CN-ns03	1NS38B - Leak Test Using NW System	Tested every refueling outage
									1NS38B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NS38B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NS38B - Position Indicator (Open)	Tested once every two years
									1NS38B - Position Indicator (Closed)	Tested once every two years
1NS41	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NS43A	CN -1563-01.00	MR	Category B		Yes	2		CN-ns03	1NS43A - Leak Test Using NW System	Tested every refueling outage
									1NS43A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NS43A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NS43A - Position Indicator (Open)	Tested once every two years
									1NS43A - Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NS46	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NS98	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1NS99	CN -1563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NS1B	CN -2563-01.00	MR	Category B		Yes	2			2NS1B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2NS2	CN -2563-01.00	SA	Category C		Yes	2			2NS2 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NS3B	CN -2563-01.00	MR	Category B		Yes	2			2NS3B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2NS4	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NS12B	CN -2563-01.00	MR	Category B		Yes	2			2NS12B - Leak Test Using NW System	Tested every refueling outage
									2NS12B - Stroke Time (Open to Closed)	Tested once quarterly
									2NS12B - Stroke Time (Closed to Open)	Tested once quarterly
									2NS12B - Position Indicator (Open)	Tested once every two years
									2NS12B - Position Indicator (Closed)	Tested once every two years
2NS13	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NS15B	CN -2563-01.00	MR	Category B		Yes	2			2NS15B - Leak Test Using NW System	Tested every refueling outage
									2NS15B - Stroke Time (Open to Closed)	Tested once quarterly
									2NS15B - Stroke Time (Closed to Open)	Tested once quarterly
									2NS15B - Position Indicator (Open)	Tested once every two years
									2NS15B - Position Indicator (Closed)	Tested once every two years
2NS16	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NS18A	CN -2563-01.00	MR	Category B		Yes	2			2NS18A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
										years
2NS19	CN -2563-01.00	SA	Category C		Yes	2			2NS19 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NS20A	CN -2563-01.00	MR	Category B		Yes	2			2NS20A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2NS21	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NS29A	CN -2563-01.00	MR	Category B		Yes	2			2NS29A - Leak Test Using NW System	Tested every refueling outage
									2NS29A - Stroke Time (Open to Closed)	Tested once quarterly
									2NS29A - Stroke Time (Closed to Open)	Tested once quarterly
									2NS29A - Position Indicator (Open)	Tested once every two years
									2NS29A - Position Indicator (Closed)	Tested once every two years
2NS30	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NS32A	CN -2563-01.00	MR	Category B		Yes	2			2NS32A - Leak Test Using NW System	Tested every refueling outage
									2NS32A - Stroke Time (Open to Closed)	Tested once quarterly
									2NS32A - Stroke Time (Closed to Open)	Tested once quarterly
									2NS32A - Position Indicator (Open)	Tested once every two years
									2NS32A - Position Indicator (Closed)	Tested once every two years
2NS33	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NS38B	CN -2563-01.00	MR	Category B		Yes	2		CN-ns03	2NS38B - Leak Test Using NW System	Tested every refueling outage
									2NS38B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NS38B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NS38B - Position Indicator (Open)	Tested once every two years
									2NS38B - Position Indicator (Closed)	Tested once every two years
2NS41	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NS43A	CN -2563-01.00	MR	Category B		Yes	2		CN-ns03	2NS43A - Leak Test Using NW System	Tested every refueling outage

CATAWBA NUCLEAR STAT

NS - CONTAINMENT SPRAY SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NS43A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NS43A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NS43A - Position Indicator (Open)	Tested once every two years
									2NS43A - Position Indicator (Closed)	Tested once every two years
2NS46	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NS98	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2NS99	CN -2563-01.00	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NV10A	CN -1554-01.00	AO	Category B		Yes	2		CN-nv11	1NV10A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									Position Indicator (Closed)	Tested at cold shutdown
									1NV10A - Leak Test Using NW System	Tested every refueling outage
1NV11A	CN -1554-01.00	AO	Category B		Yes	2		CN-nv11	Position Indicator (Closed)	Tested at cold shutdown
									1NV11A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1NV11A - Leak Test Using NW System	Tested every refueling outage
1NV13A	CN -1554-01.00	AO	Category B		Yes	2		CN-nv11	Position Indicator (Closed)	Tested at cold shutdown
									1NV13A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1NV13A - Leak Test Using NW System	Tested every refueling outage
1NV14	CN -1554-01.00	SA	Category A		Yes	2			1NV14 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
									1NV14 - Leak Test - Appendix J (Reverse Direct)	10CFR50, App J, Opt B
1NV15B	CN -1554-01.00	MR	Category A		Yes	2		CN-nv01	Position Indicator (Closed)	Tested once every two years
									1NV15B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV15B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NV15B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NV46	CN -1554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NV49	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV57	CN -1554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NV60	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV68	CN -1554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Both)	Condition Monitoring
1NV71	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV79	CN -1554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
1NV82	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV87	CN -1554-01.00	SA	Category C		Yes	2			1NV87 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NV89A	CN -1554-01.00	MR	Category B		Yes	2		CN-nv02	Position Indicator (Closed)	Tested once every two years
									1NV89A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV89A - Leak Test Using NW System	Tested every refueling outage
1NV90	CN -1554-01.00	SA	Category AC		Yes	2			Full Stroke (Both)	Condition Monitoring
									1NV90 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1NV91B	CN -1554-01.00	MR	Category B		Yes	2		CN-nv02	Position Indicator (Closed)	Tested once every two years
									1NV91B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV91B - Leak Test Using NW System	Tested every refueling outage
1NV188A	CN -1554-01.01	MR	Category B		Yes	2		CN-nv03	Position Indicator (Closed)	Tested once every two years
									1NV188A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV188A - Stroke Time (Open to Closed)	Tested every refueling outage
1NV189B	CN -1554-01.01	MR	Category B		Yes	2		CN-nv03	Position Indicator (Closed)	Tested once every two years
									1NV189B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV189B - Stroke Time (Open to Closed)	Tested every refueling outage
1NV202B	CN -1554-01.06	ML	Category B		Yes	2		CN-nv07	1NV202B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV202B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NV202B - Position Indicator (Open)	Tested once every two years

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NV202B - Position Indicator (Closed)	Tested once every two years
1NV203A	CN -1554-01.06	ML	Category B		Yes	2		CN-nv07	1NV203A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV203A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NV203A - Position Indicator (Open)	Tested once every two years
									1NV203A - Position Indicator (Closed)	Tested once every two years
1NV206	CN -1554-01.06	AO	Category B		Yes	2			1NV206 - Position Indicator (Open)	Tested once every two years
1NV218	CN -1554-01.06	AO	Category B		Yes	2			1NV218 - Position Indicator (Open)	Tested once every two years
1NV220	CN -1554-01.01	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
									1NV220 - Full Stroke (Open)	Condition Monitoring
1NV222	CN -1554-01.01	SA	Category C		Yes	2			1NV222 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NV223	CN -1554-01.01	SA	Category C		Yes	2			1NV223 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NV252A	CN -1554-01.07	MR	Category B		Yes	2		CN-nv10	1NV252A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV252A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NV252A - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NV252A - Stroke Time (Closed to Open)	Tested every refueling outage
									1NV252A - Position Indicator (Open)	Tested once every two years
									1NV252A - Position Indicator (Closed)	Tested once every two years
1NV253B	CN -1554-01.07	MR	Category B		Yes	2		CN-nv10	1NV253B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV253B - Stroke Time (Open to Closed)	Tested every refueling outage
									1NV253B - Stroke Time (Closed to Open)	Tested at cold shutdown
									1NV253B - Stroke Time (Closed to Open)	Tested every refueling outage
									1NV253B - Position Indicator (Open)	Tested once every two years
									1NV253B - Position Indicator (Closed)	Tested once every two years
1NV254	CN -1554-01.07	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NV268	CN -1554-01.07	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1NV270	CN -1554-01.07	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV273	CN -1554-01.07	SA	Category C		Yes	2			1NV273 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NV288	CN -1554-01.07	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV290	CN -1554-01.07	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV312A	CN -1554-01.02	MR	Category B		Yes	2		CN-nv04	1NV312A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV312A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NV314B	CN -1554-01.02	MR	Category B		Yes	2		CN-nv04	1NV314B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1NV314B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NV492	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV493	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV494	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV495	CN -1554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NV813	CN -1554-01.07	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
1NV865A	CN -1554-01.08	MR	Category B		Yes	2			1NV865A - Stroke Time (Open to Closed)	Tested once quarterly
									1NV865A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1NV872A	CN -1554-01.08	ML	Category A		Yes	2			1NV872A - Stroke Time (Open to Closed)	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NV872A - Stroke Time (Open to Closed)	Tested every refueling outage
									1NV872A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1NV874	CN -1554-01.08	SA	Category AC		Yes	2			1NV874 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NV010A	CN -2554-01.00	AO	Category B		Yes	2		CN-nv11	2NV010A - Failed to Safe Pos and Timed (Opn to Cls	Tested at cold shutdown
									2NV010A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV11A	CN -2554-01.00	AO	Category B		Yes	2		CN-nv11	2NV11A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2NV11A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV13A	CN -2554-01.00	AO	Category B		Yes	2		CN-nv11	2NV13A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2NV13A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV14	CN -2554-01.00	SA	Category A		Yes	2			2NV14 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
									2NV14 - Leak Test - Appendix J (Reverse Direct)	10CFR50, App J, Opt B
2NV15B	CN -2554-01.00	MR	Category A		Yes	2		CN-nv01	2NV15B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV15B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NV15B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NV46	CN -2554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Both)	Condition Monitoring
2NV49	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV57	CN -2554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2NV60	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV68	CN -2554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2NV71	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV79	CN -2554-01.05	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2NV82	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV87	CN -2554-01.00	SA	Category C		Yes	2			2NV87 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NV89A	CN -2554-01.00	MR	Category B		Yes	2		CN-nv02	2NV89A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV89A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV90	CN -2554-01.00	SA	Category AC		Yes	2			2NV90 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2NV91B	CN -2554-01.00	MR	Category B		Yes	2		CN-nv02	2NV91B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV91B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV188A	CN -2554-01.01	MR	Category B		Yes	2		CN-nv03	2NV188A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV188A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV189B	CN -2554-01.01	MR	Category B		Yes	2		CN-nv03	2NV189B - Stroke Time (Open to Closed)	Tested at cold shutdown

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2NV189B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV202B	CN -2554-01.06	ML	Category B		Yes	2		CN-nv07	2NV202B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV202B - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NV202B - Position Indicator (Open)	Tested once every two years
									2NV202B - Position Indicator (Closed)	Tested once every two years
2NV203A	CN -2554-01.06	ML	Category B		Yes	2		CN-nv07	2NV203A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV203A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NV203A - Position Indicator (Open)	Tested once every two years
									2NV203A - Position Indicator (Closed)	Tested once every two years
2NV206	CN -2554-01.06	AO	Category B		Yes	2			2NV206 - Position Indicator (Open)	Tested once every two years
2NV218	CN -2554-01.06	AO	Category B		Yes	2			2NV218 - Position Indicator (Open)	Tested once every two years
2NV220	CN -2554-01.01	SA	Category C		Yes	2			2NV220 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Both)	Condition Monitoring
2NV222	CN -2554-01.01	SA	Category C		Yes	2			2NV222 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NV223	CN -2554-01.01	SA	Category C		Yes	2			2NV223 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NV252A	CN -2554-01.07	MR	Category B		Yes	2		CN-nv10	2NV252A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV252A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NV252A - Stroke Time (Closed to Open)	Tested at cold shutdown
									2NV252A - Stroke Time (Closed to Open)	Tested every refueling outage
									2NV252A - Position Indicator (Open)	Tested once every two years
									2NV252A - Position Indicator (Closed)	Tested once every two years
2NV253B	CN -2554-01.07	MR	Category B		Yes	2		CN-nv10	2NV253B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV253B - Stroke Time (Open to Closed)	Tested every refueling outage
									2NV253B - Stroke Time	Tested at cold shutdown

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Closed to Open)	
									2NV253B - Stroke Time (Closed to Open)	Tested every refueling outage
									2NV253B - Position Indicator (Open)	Tested once every two years
									2NV253B - Position Indicator (Closed)	Tested once every two years
2NV254	CN -2554-01.07	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NV268	CN -2554-01.07	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV270	CN -2554-01.07	SA	Category C		Yes	2			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV273	CN -2554-01.07	SA	Category C		Yes	2			2NV273 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NV288	CN -2554-01.07	SA	Category C		Yes	2			2NV288 - Full Stroke (Closed)	Condition Monitoring
									2NV288 - Full Stroke (Open)	Condition Monitoring
2NV290	CN -2554-01.07	SA	Category C		Yes	2			2NV290 - Full Stroke (Open)	Condition Monitoring
									2NV290 - Full Stroke (Closed)	Condition Monitoring
2NV312A	CN -2554-01.02	MR	Category B		Yes	2		CN-nv04	2NV312A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV312A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV314B	CN -2554-01.02	MR	Category B		Yes	2		CN-nv04	2NV314B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2NV314B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV492	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV493	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV494	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NV495	CN -2554-01.05	SA	Category C		Yes	1			Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
2NV813	CN -2554-01.07	SA	Category C		Yes	2			Full Stroke (Both)	Condition Monitoring
2NV865A	CN -2554-01.08	MR	Category B		Yes	2			2NV865A - Stroke Time (Open to Closed)	Tested once quarterly
									2NV865A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV872A	CN -2554-01.08	MR	Category A		Yes	2			2NV872A - Stroke Time (Open to Closed)	Tested once quarterly
									2NV872A - Stroke Time (Open to Closed)	Tested every refueling outage
									2NV872A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2NV874	CN -2554-01.08	SA	Category AC		Yes	2			2NV874 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NW6	CN -1569-01.00	SA	Category C		Yes	2			1NW6 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW8A	CN -1569-01.00	SO	Category B		Yes	2			Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
									1NW8A - Position Indicator (Open)	Tested every refueling outage
									1NW8A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW13A	CN -1569-01.00	SO	Category B		Yes	2			1NW13A - Position Indicator (Open)	Tested every refueling outage
									1NW13A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW17	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW17 - Full Stroke (Open)	Condition Monitoring
1NW20A	CN -1569-01.00	SO	Category B		Yes	2			1NW20A - Position Indicator (Open)	Tested every refueling outage
									1NW20A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW21	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW21 - Full Stroke (Open)	Condition Monitoring
1NW24	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW24 - Full Stroke (Open)	Condition Monitoring
1NW27	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW27 - Full Stroke (Open)	Condition Monitoring
1NW35A	CN -1569-01.00	ML	Category B		Yes	2			1NW35A - Stroke Time (Open to Closed)	Tested once quarterly
									1NW35A - Stroke Time (Closed to Open)	Tested once quarterly
									1NW35A - Position Indicator (Open)	Tested every refueling outage
									1NW35A - Position Indicator (Closed)	Tested every refueling outage
1NW37	CN -1569-01.00	SA	Category C		Yes	2			1NW37 - Full Stroke (Closed)	Condition Monitoring
									1NW37 - Full Stroke (Open)	Condition Monitoring
1NW40	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW40 - Full Stroke	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
1NW43	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW43 - Full Stroke (Open)	Condition Monitoring
1NW46A	CN -1569-01.00	SO	Category B		Yes	2			1NW46A - Position Indicator (Open)	Tested every refueling outage
									1NW46A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW47	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW47 - Full Stroke (Open)	Condition Monitoring
1NW50	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW50 - Full Stroke (Open)	Condition Monitoring
1NW61B	CN -1569-01.00	SO	Category B		Yes	2			Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
									1NW61B - Position Indicator (Open)	Tested every refueling outage
									1NW61B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW63	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW63 - Full Stroke (Open)	Condition Monitoring
1NW68B	CN -1569-01.00	SO	Category B		Yes	2			1NW68B - Position Indicator (Open)	Tested every refueling outage
									1NW68B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW69B	CN -1569-01.00	SO	Category B		Yes	2			1NW69B - Position Indicator (Open)	Tested every refueling outage
									1NW69B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW70	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW70 - Full Stroke (Open)	Condition Monitoring
1NW74	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW74 - Full Stroke (Open)	Condition Monitoring
1NW77	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring
									1NW77 - Full Stroke (Open)	Condition Monitoring
1NW80	CN -1569-01.00	SA	Category C		Yes	2			Full Stroke (Closed)	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									1NW80 - Full Stroke (Open)	Condition Monitoring
1NW86	CN -1569-01.00	SA	Category C		Yes	2			1NW86 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW89	CN -1569-01.00	SA	Category C		Yes	2			1NW89 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW92	CN -1569-01.00	SA	Category C		Yes	2			1NW92 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW95	CN -1569-01.00	SA	Category C		Yes	2			1NW95 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW98	CN -1569-01.00	SA	Category C		Yes	2			1NW98 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW101	CN -1569-01.00	SA	Category C		Yes	2			1NW101 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW105B	CN -1569-01.00	ML	Category B		Yes	2			1NW105B - Position Indicator (Open)	Tested every refueling outage
									1NW105B - Stroke Time (Open to Closed)	Tested once quarterly
									1NW105B - Stroke Time (Closed to Open)	Tested once quarterly
									1NW105B - Position Indicator (Closed)	Tested every refueling outage
1NW107	CN -1569-01.00	SA	Category C		Yes	2			1NW107 - Full Stroke (Closed)	Condition Monitoring
									1NW107 - Full Stroke (Open)	Condition Monitoring
1NW109	CN -1569-01.00	SA	Category C		Yes	2			1NW109 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW110B	CN -1569-01.00	SO	Category B		Yes	2			1NW110B - Position Indicator (Open)	Tested every refueling outage
									1NW110B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW111	CN -1569-01.00	SA	Category C		Yes	2			1NW111 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW114	CN -1569-01.00	SA	Category C		Yes	2			1NW114 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW120	CN -1569-01.00	SA	Category C		Yes	2			1NW120 - Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
1NW121	CN -1569-01.00	SA	Category C		Yes	2			1NW121 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW123	CN -1569-01.00	SA	Category C		Yes	2			1NW123 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW124	CN -1569-01.00	SA	Category C		Yes	2			1NW124 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW125	CN -1569-01.00	SA	Category C		Yes	2			1NW125 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW126	CN -1569-01.00	SA	Category C		Yes	2			1NW126 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW127	CN -1569-01.00	SA	Category C		Yes	2			1NW127 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW128	CN -1569-01.00	SA	Category C		Yes	2			1NW128 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW129	CN -1569-01.00	SA	Category C		Yes	2			1NW129 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW130	CN -1569-01.00	SA	Category C		Yes	2			1NW130 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW131	CN -1569-01.00	SA	Category C		Yes	2			1NW131 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW132	CN -1569-01.00	SA	Category C		Yes	2			1NW132 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW133	CN -1569-01.00	SA	Category C		Yes	2			1NW133 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW135	CN -1569-01.00	SA	Category C		Yes	2			1NW135 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW136	CN -1569-01.00	SA	Category C		Yes	2			1NW136 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW138	CN -1569-01.00	SA	Category C		Yes	2			1NW138 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW139	CN -1569-01.00	SA	Category C		Yes	2			1NW139 - Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
1NW140	CN -1569-01.00	SA	Category C		Yes	2			1NW140 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW141	CN -1569-01.00	SA	Category C		Yes	2			1NW141 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW145B	CN -1569-01.00	SO	Category B		Yes	2			1NW145B - Position Indicator (Open)	Tested every refueling outage
									1NW145B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
1NW147	CN -1569-01.00	SA	Category C		Yes	2			1NW147 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW148	CN -1569-01.00	SA	Category C		Yes	2			1NW148 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW159	CN -1569-01.00	SA	Category C		Yes	2			1NW159 - Full Stroke (Open)	Tested every refueling outage
									Full Stroke (Closed)	Condition Monitoring
1NW160	CN -1569-01.00	SA	Category C		Yes	2			1NW160 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW163	CN -1569-01.00	SA	Category C		Yes	2			1NW163 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW164	CN -1569-01.00	SA	Category C		Yes	2			1NW164 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW168	CN -1569-01.00	SA	Category C		Yes	2			1NW168 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW169	CN -1569-01.00	SA	Category C		Yes	2			1NW169 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW171	CN -1569-01.00	SA	Category C		Yes	2			1NW171 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW172	CN -1569-01.00	SA	Category C		Yes	2			1NW172 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW175A	CN -1569-01.00	SO	Category B		Yes	2			1NW175A - Position Indicator (Open)	Tested every refueling outage
									1NW175A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									1NW175A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
1NW178	CN -1569-01.00	SA	Category C		Yes	2			1NW178 - Full Stroke	Condition Monitoring

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
									Full Stroke (Closed)	Condition Monitoring
1NW179	CN -1569-01.00	SA	Category C		Yes	2			1NW179 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW180A	CN -1569-01.00	SO	Category B		Yes	2			1NW180A - Position Indicator (Open)	Tested every refueling outage
									1NW180A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW183	CN -1569-01.00	SA	Category C		Yes	2			1NW183 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW184	CN -1569-01.00	SA	Category C		Yes	2			1NW184 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW185A	CN -1569-01.00	SO	Category B		Yes	2			1NW185A - Position Indicator (Open)	Tested every refueling outage
									1NW185A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									1NW185A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
1NW188	CN -1569-01.00	SA	Category C		Yes	2			1NW188 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW189	CN -1569-01.00	SA	Category C		Yes	2			1NW189 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW195A	CN -1569-01.00	SO	Category B		Yes	2			1NW195A - Position Indicator (Open)	Tested every refueling outage
									1NW195A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW196	CN -1569-01.00	SA	Category C		Yes	2			1NW196 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW197	CN -1569-01.00	SA	Category C		Yes	2			1NW197 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW200A	CN -1569-01.00	SO	Category B		Yes	2			1NW200A - Position Indicator (Open)	Tested every refueling outage
									1NW200A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW201	CN -1569-01.00	SA	Category C		Yes	2			1NW201 - Full Stroke	Condition Monitoring

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
									Full Stroke (Closed)	Condition Monitoring
1NW202	CN -1569-01.00	SA	Category C		Yes	2			1NW202 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW205	CN -1569-01.00	SA	Category C		Yes	2			1NW205 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW206	CN -1569-01.00	SA	Category C		Yes	2			1NW206 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW209	CN -1569-01.00	SA	Category C		Yes	2			1NW209 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW210	CN -1569-01.00	SA	Category C		Yes	2			1NW210 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW213	CN -1569-01.00	SA	Category C		Yes	2			1NW213 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW214	CN -1569-01.00	SA	Category C		Yes	2			1NW214 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW217B	CN -1569-01.00	SO	Category B		Yes	2			1NW217B - Position Indicator (Open)	Tested every refueling outage
									1NW217B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW218	CN -1569-01.00	SA	Category C		Yes	2			1NW218 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW219	CN -1569-01.00	SA	Category C		Yes	2			1NW219 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW222B	CN -1569-01.00	SO	Category B		Yes	2			1NW222B - Position Indicator (Open)	Tested every refueling outage
									1NW222B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW223	CN -1569-01.00	SA	Category C		Yes	2			1NW223 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW224	CN -1569-01.00	SA	Category C		Yes	2			1NW224 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW227B	CN -1569-01.00	SO	Category B		Yes	2			1NW227B - Position	Tested every refueling

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open)	outage
									1NW227B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW230	CN -1569-01.00	SA	Category C		Yes	2			1NW230 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW231	CN -1569-01.00	SA	Category C		Yes	2			1NW231 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW237B	CN -1569-01.00	SO	Category B		Yes	2			1NW237B - Position Indicator (Open)	Tested every refueling outage
									1NW237B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									1NW237B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
1NW240	CN -1569-01.00	SA	Category C		Yes	2			1NW240 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW241	CN -1569-01.00	SA	Category C		Yes	2			1NW241 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW242B	CN -1569-01.00	SO	Category B		Yes	2			1NW242B - Position Indicator (Open)	Tested every refueling outage
									1NW242B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
1NW245	CN -1569-01.00	SA	Category C		Yes	2			1NW245 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW246	CN -1569-01.00	SA	Category C		Yes	2			1NW246 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1NW247	CN -1569-01.00	SA	Category C		Yes	2			1NW247 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NW248	CN -1569-01.00	SA	Category C		Yes	2			1NW248 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1NW249	CN -1569-01.00	SA	Category C		Yes	2			1NW249 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NW6	CN -2569-01.00	SA	Category C		Yes	2			2NW6 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW8A	CN -2569-01.00	SO	Category B		Yes	2			2NW8A - Position Indicator (Open)	Tested every refueling outage
									2NW8A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Fast Acting Stroke Time (Closed to Open)	Tested every refueling outage
2NW13A	CN -2569-01.00	SO	Category B		Yes	2			2NW13A - Position Indicator (Open)	Tested every refueling outage
									2NW13A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2NW17	CN -2569-01.00	SA	Category C		Yes	2			2NW17 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW20A	CN -2569-01.00	SO	Category B		Yes	2			2NW20A - Position Indicator (Open)	Tested every refueling outage
									2NW20A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2NW21	CN -2569-01.00	SA	Category C		Yes	2			2NW21 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW24	CN -2569-01.00	SA	Category C		Yes	2			2NW24 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW27	CN -2569-01.00	SA	Category C		Yes	2			2NW27 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW35A	CN -2569-01.00	ML	Category B		Yes	2			2NW35A - Position Indicator (Open)	Tested every refueling outage
									2NW35A - Stroke Time (Open to Closed)	Tested once quarterly
									2NW35A - Stroke Time (Closed to Open)	Tested once quarterly
									2NW35A - Position Indicator (Closed)	Tested every refueling outage
2NW37	CN -2569-01.00	SA	Category C		Yes	2			2NW37 - Full Stroke (Closed)	Tested every refueling outage
									2NW37 - Full Stroke (Open)	Condition Monitoring
2NW40	CN -2569-01.00	SA	Category C		Yes	2			2NW40 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW43	CN -2569-01.00	SA	Category C		Yes	2			2NW43 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW46A	CN -2569-01.00	SO	Category B		Yes	2			2NW46A - Position Indicator (Open)	Tested every refueling outage
									2NW46A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2NW47	CN -2569-01.00	SA	Category C		Yes	2			2NW47 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW50	CN -2569-01.00	SA	Category C		Yes	2			2NW50 - Full Stroke	Condition Monitoring

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
									Full Stroke (Closed)	Condition Monitoring
2NW61B	CN -2569-01.00	SO	Category B		Yes	2			2NW61B - Position Indicator (Open)	Tested every refueling outage
									2NW61B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW61B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW63	CN -2569-01.00	SA	Category C		Yes	2			2NW63 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW68B	CN -2569-01.00	SO	Category B		Yes	2			2NW68B - Position Indicator (Open)	Tested every refueling outage
									2NW68B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2NW69B	CN -2569-01.00	SO	Category B		Yes	2			2NW69B - Position Indicator (Open)	Tested every refueling outage
									2NW69B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2NW70	CN -2569-01.00	SA	Category C		Yes	2			2NW70 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW74	CN -2569-01.00	SA	Category C		Yes	2			2NW74 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW77	CN -2569-01.00	SA	Category C		Yes	2			2NW77 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW80	CN -2569-01.00	SA	Category C		Yes	2			2NW80 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW86	CN -2569-01.00	SA	Category C		Yes	2			2NW86 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW89	CN -2569-01.00	SA	Category C		Yes	2			2NW89 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW92	CN -2569-01.00	SA	Category C		Yes	2			2NW92 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW95	CN -2569-01.00	SA	Category C		Yes	2			2NW95 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW98	CN -2569-01.00	SA	Category C		Yes	2			2NW98 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW101	CN -2569-01.00	SA	Category C		Yes	2			2NW101 - Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
2NW105B	CN -2569-01.00	ML	Category B		Yes	2			2NW105B - Position Indicator (Open)	Tested every refueling outage
									2NW105B - Stroke Time (Open to Closed)	Tested once quarterly
									2NW105B - Stroke Time (Closed to Open)	Tested once quarterly
									2NW105B - Position Indicator (Closed)	Tested every refueling outage
2NW107	CN -2569-01.00	SA	Category C		Yes	2			2NW107 - Full Stroke (Closed)	Condition Monitoring
									2NW107 - Full Stroke (Open)	Condition Monitoring
2NW109	CN -2569-01.00	SA	Category C		Yes	2			2NW109 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW110B	CN -2569-01.00	SO	Category B		Yes	2			2NW110B - Position Indicator (Open)	Tested every refueling outage
									2NW110B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									Fast Acting Stroke Time (Closed to Open)	Tested once quarterly
2NW111	CN -2569-01.00	SA	Category C		Yes	2			2NW111 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW114	CN -2569-01.00	SA	Category C		Yes	2			2NW114 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW120	CN -2569-01.00	SA	Category C		Yes	2			2NW120 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW121	CN -2569-01.00	SA	Category C		Yes	2			2NW121 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW123	CN -2569-01.00	SA	Category C		Yes	2			2NW123 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW124	CN -2569-01.00	SA	Category C		Yes	2			2NW124 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW125	CN -2569-01.00	SA	Category C		Yes	2			2NW125 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW126	CN -2569-01.00	SA	Category C		Yes	2			2NW126 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW127	CN -2569-01.00	SA	Category C		Yes	2			2NW127 - Full Stroke (Open)	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Closed)	Condition Monitoring
2NW128	CN -2569-01.00	SA	Category C		Yes	2			2NW128 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW129	CN -2569-01.00	SA	Category C		Yes	2			2NW129 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW130	CN -2569-01.00	SA	Category C		Yes	2			2NW130 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW131	CN -2569-01.00	SA	Category C		Yes	2			2NW131 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW132	CN -2569-01.00	SA	Category C		Yes	2			2NW132 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW133	CN -2569-01.00	SA	Category C		Yes	2			2NW133 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW135	CN -2569-01.00	SA	Category C		Yes	2			2NW135 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW136	CN -2569-01.00	SA	Category C		Yes	2			2NW136 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW138	CN -2569-01.00	SA	Category C		Yes	2			2NW138 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW139	CN -2569-01.00	SA	Category C		Yes	2			2NW139 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW140	CN -2569-01.00	SA	Category C		Yes	2			2NW140 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW141	CN -2569-01.00	SA	Category C		Yes	2			2NW141 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW145B	CN -2569-01.00	SO	Category B		Yes	2			2NW145B - Position Indicator (Open)	Tested every refueling outage
									2NW145B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
2NW147	CN -2569-01.00	SA	Category C		Yes	2			2NW147 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW148	CN -2569-01.00	SA	Category C		Yes	2			2NW148 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW159	CN -2569-01.00	SA	Category C		Yes	2			2NW159 - Full Stroke	Condition Monitoring

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
									Full Stroke (Closed)	Condition Monitoring
2NW160	CN -2569-01.00	SA	Category C		Yes	2			2NW160 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW163	CN -2569-01.00	SA	Category C		Yes	2			2NW163 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW164	CN -2569-01.00	SA	Category C		Yes	2			2NW164 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW168	CN -2569-01.00	SA	Category C		Yes	2			2NW168 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW169	CN -2569-01.00	SA	Category C		Yes	2			2NW169 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW171	CN -2569-01.00	SA	Category C		Yes	2			2NW171 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW172	CN -2569-01.00	SA	Category C		Yes	2			2NW172 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW175A	CN -2569-01.00	SO	Category B		Yes	2			2NW175A - Position Indicator (Open)	Tested every refueling outage
									2NW175A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW175A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW178	CN -2569-01.00	SA	Category C		Yes	2			2NW178 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW179	CN -2569-01.00	SA	Category C		Yes	2			2NW179 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW180A	CN -2569-01.00	SO	Category B		Yes	2			2NW180A - Position Indicator (Open)	Tested every refueling outage
									2NW180A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW180A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW183	CN -2569-01.00	SA	Category C		Yes	2			2NW183 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW184	CN -2569-01.00	SA	Category C		Yes	2			2NW184 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW185A	CN -2569-01.00	SO	Category B		Yes	2			2NW185A - Position	Tested every refueling

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Open)	outage
									2NW185A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW185A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW188	CN -2569-01.00	SA	Category C		Yes	2			2NW188 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW189	CN -2569-01.00	SA	Category C		Yes	2			2NW189 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW195A	CN -2569-01.00	SO	Category B		Yes	2			2NW195A - Position Indicator (Open)	Tested every refueling outage
									2NW195A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW195A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW196	CN -2569-01.00	SA	Category C		Yes	2			2NW196 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW197	CN -2569-01.00	SA	Category C		Yes	2			2NW197 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW200A	CN -2569-01.00	SO	Category B		Yes	2			2NW200A - Position Indicator (Open)	Tested every refueling outage
									2NW200A - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW200A - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW201	CN -2569-01.00	SA	Category C		Yes	2			2NW201 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW202	CN -2569-01.00	SA	Category C		Yes	2			2NW202 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW205	CN -2569-01.00	SA	Category C		Yes	2			2NW205 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW206	CN -2569-01.00	SA	Category C		Yes	2			2NW206 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW209	CN -2569-01.00	SA	Category C		Yes	2			2NW209 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW210	CN -2569-01.00	SA	Category C		Yes	2			2NW210 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW213	CN -2569-01.00	SA	Category C		Yes	2			2NW213 - Full Stroke	Condition Monitoring

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
									Full Stroke (Closed)	Condition Monitoring
2NW214	CN -2569-01.00	SA	Category C		Yes	2			2NW214 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW217B	CN -2569-01.00	SO	Category B		Yes	2			2NW217B - Position Indicator (Open)	Tested every refueling outage
									2NW217B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW217B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW218	CN -2569-01.00	SA	Category C		Yes	2			2NW218 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW219	CN -2569-01.00	SA	Category C		Yes	2			2NW219 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW222B	CN -2569-01.00	SO	Category B		Yes	2			2NW222B - Position Indicator (Open)	Tested every refueling outage
									2NW222B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW222B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW223	CN -2569-01.00	SA	Category C		Yes	2			2NW223 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW224	CN -2569-01.00	SA	Category C		Yes	2			2NW224 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW227B	CN -2569-01.00	SO	Category B		Yes	2			2NW227B - Position Indicator (Open)	Tested every refueling outage
									2NW227B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW227B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW230	CN -2569-01.00	SA	Category C		Yes	2			2NW230 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW231	CN -2569-01.00	SA	Category C		Yes	2			2NW231 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW237B	CN -2569-01.00	SO	Category B		Yes	2			2NW237B - Position Indicator (Open)	Tested every refueling outage
									2NW237B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW237B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW240	CN -2569-01.00	SA	Category C		Yes	2			2NW240 - Full Stroke	Condition Monitoring

CATAWBA NUCLEAR STAT

NW - CONT PENE VALVE EJECTION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open)	
									Full Stroke (Closed)	Condition Monitoring
2NW241	CN -2569-01.00	SA	Category C		Yes	2			2NW241 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW242B	CN -2569-01.00	SO	Category B		Yes	2			2NW242B - Position Indicator (Open)	Tested every refueling outage
									2NW242B - Fast Acting Stroke Time (Cls to Opn)	Tested once quarterly
									2NW242B - Fast Acting Stroke Time (Cls to Opn)	Tested every refueling outage
2NW245	CN -2569-01.00	SA	Category C		Yes	2			2NW245 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW246	CN -2569-01.00	SA	Category C		Yes	2			2NW246 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
2NW247	CN -2569-01.00	SA	Category C		Yes	2			2NW247 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NW248	CN -2569-01.00	SA	Category C		Yes	2			2NW248 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2NW249	CN -2569-01.00	SA	Category C		Yes	2			2NW249 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

RF - FIRE PROTECTION - INTERIOR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1RF389B	CN -1599-02.02	MR	Category B		Yes	2		CN-rf02	1RF389B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1RF389B - Stroke Time (Open to Closed)	Tested every refueling outage
									1RF389B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1RF392	CN -1599-02.02	SA	Category AC		Yes	2			1RF392 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1RF447B	CN -1599-02.02	MR	Category B		Yes	2		CN-rf02	1RF447B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1RF447B - Stroke Time (Open to Closed)	Tested every refueling outage
									1RF447B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1RF448	CN -1599-02.02	SA	Category AC		Yes	2			1RF448 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1RF457B	CN -1599-02.02	MR	Category B		Yes	2			1RF457B - Stroke Time (Open to Closed)	Tested once quarterly
									1RF457B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RF389B	CN -1599-02.01	MR	Category B		Yes	2		CN-rf02	2RF389B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2RF389B - Stroke Time (Open to Closed)	Tested every refueling outage
									2RF389B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RF392	CN -1599-02.01	SA	Category AC		Yes	2			2RF392 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2RF447B	CN -1599-02.01	MR	Category B		Yes	2		CN-rf02	2RF447B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2RF447B - Stroke Time (Open to Closed)	Tested every refueling outage
									2RF447B - Leak Test Using NW System	Tested every refueling outage

CATAWBA NUCLEAR STAT

RF - FIRE PROTECTION - INTERIOR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Position Indicator (Closed)	Tested once every two years
2RF448	CN -1599-02.01	SA	Category AC		Yes	2			2RF448 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2RF457B	CN -1599-02.01	MR	Category B		Yes	2			2RF457B - Stroke Time (Open to Closed)	Tested once quarterly
									2RF457B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

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
1RN1A	CN -1574-01.00	ML	Category B		Yes	3			1RN1A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1RN2B	CN -1574-01.00	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN2B - Stroke Time (Open to Closed)	Tested once quarterly
1RN3A	CN -1574-01.02	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN3A - Stroke Time (Closed to Open)	Tested once quarterly
1RN4B	CN -1574-01.02	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN4B - Stroke Time (Closed to Open)	Tested once quarterly
1RN5A	CN -1574-01.00	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN5A - Stroke Time (Open to Closed)	Tested once quarterly
1RN6B	CN -1574-01.00	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN6B - Stroke Time (Open to Closed)	Tested once quarterly
1RN9	CN -1574-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1RN11A	CN -1574-01.00	MO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN11A - Stroke Time (Closed to Open)	Tested once quarterly
1RN18	CN -1574-01.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1RN20B	CN -1574-01.02	MO	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN20B - Stroke Time (Closed to Open)	Tested once quarterly
1RN28A	CN -1574-01.00	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN28A - Stroke Time (Closed to Open)	Tested once quarterly
1RN30A	CN -1574-01.00	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN30A - Stroke Time (Closed to Open)	Tested once quarterly
1RN38B	CN -1574-01.02	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN38B - Stroke Time (Closed to Open)	Tested once quarterly

CATAWBA NUCLEAR STAT

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
1RN40B	CN -1574-01.02	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN40B - Stroke Time (Closed to Open)	Tested once quarterly
1RN47A	CN -1574-01.01	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN47A - Stroke Time (Open to Closed)	Tested once quarterly
									1RN47A - Stroke Time (Open to Closed)	Tested every refueling outage
1RN48B	CN -1574-01.01	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN48B - Stroke Time (Open to Closed)	Tested once quarterly
									1RN48B - Stroke Time (Open to Closed)	Tested every refueling outage
1RN49A	CN -1574-01.01	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN49A - Stroke Time (Open to Closed)	Tested once quarterly
									1RN49A - Stroke Time (Open to Closed)	Tested every refueling outage
1RN50B	CN -1574-01.01	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN50B - Stroke Time (Open to Closed)	Tested once quarterly
									1RN50B - Stroke Time (Open to Closed)	Tested every refueling outage
1RN51A	CN -1574-01.05	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN51A - Stroke Time (Open to Closed)	Tested once quarterly
									1RN51A - Stroke Time (Open to Closed)	Tested every refueling outage
1RN52B	CN -1574-01.05	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN52B - Stroke Time (Open to Closed)	Tested once quarterly
									1RN52B - Stroke Time (Open to Closed)	Tested every refueling outage
1RN53B	CN -1574-01.05	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN53B - Stroke Time (Open to Closed)	Tested once quarterly
1RN54A	CN -1574-01.05	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN54A - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

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
1RN57A	CN -1574-01.05	ML	Category B		Yes	3			Position Indicator (Closed)	Tested once every two years
									1RN57A - Stroke Time (Open to Closed)	Tested once quarterly
1RN58B	CN -1574-01.05	ML	Category B		Yes	3			Position Indicator (Open)	Tested once every two years
									1RN58B - Stroke Time (Closed to Open)	Tested once quarterly
									1RN58B - Stroke Time (Closed to Open)	Tested every refueling outage
1RN63A	CN -1574-01.05	ML	Category B		Yes	3			1RN63A - Stroke Time (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									1RN63A - Stroke Time (Closed to Open)	Tested once quarterly
1RN144A	CN -1574-02.00	ML	Category B		Yes	3			1RN144A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN148A	CN -1574-02.00	ML	Category B		Yes	3			1RN148A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN225B	CN -1574-02.04	ML	Category B		Yes	3			1RN225B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN229B	CN -1574-02.04	ML	Category B		Yes	3			1RN229B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN232A	CN -1574-02.01	ML	Category B		Yes	3			1RN232A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN250A	CN -1574-02.01	MR	Category B		Yes	3			1RN250A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN291	CN -1574-02.01	AO	Category B		Yes	3			1RN291 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years

CATAWBA NUCLEAR STAT

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
1RN292B	CN -1574-02.05	ML	Category B		Yes	3			1RN292B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN310B	CN -1574-02.05	MR	Category B		Yes	3			1RN310B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN351	CN -1574-02.05	AO	Category B		Yes	3			1RN351 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
1RN404B	CN -1574-02.08	MR	Category B		Yes	2			1RN404B - Stroke Time (Open to Closed)	Tested once quarterly
									1RN404B - Stroke Time (Open to Closed)	Tested every refueling outage
									1RN404B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1RN405	CN -1574-02.08	SA	Category AC		Yes	2			1RN405 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1RN437B	CN -1574-02.08	MR	Category B		Yes	2		CN-m02	1RN437B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1RN437B - Stroke Time (Open to Closed)	Tested every refueling outage
									1RN437B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1RN438	CN -1574-02.08	SA	Category AC		Yes	2			1RN438 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1RN484A	CN -1574-02.02	MR	Category B		Yes	2		CN-m03	1RN484A - Stroke Time (Open to Closed)	Tested at cold shutdown
									1RN484A - Stroke Time (Open to Closed)	Tested every refueling outage
									1RN484A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

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
1RN485	CN -1574-02.02	SA	Category AC		Yes	2			1RN485 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1RN487B	CN -1574-02.02	MR	Category B		Yes	2		CN-rn03	1RN487B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1RN487B - Stroke Time (Open to Closed)	Tested every refueling outage
									1RN487B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1RN499	CN -1574-02.03	SA	Category C		Yes	3			1RN499 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1RN807	CN -1574-02.03	SA	Category C		Yes	3			1RN807 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1RN815	CN -1574-02.03	SA	Category C		Yes	3			1RN815 - Relief Valve Test (Closed to Open)	Tested every refueling outage
1RN823	CN -1574-02.03	SA	Category C		Yes	3			1RN823 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1RN843B	CN -1574-01.05	ML	Category B		Yes	3			1RN843B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1RN846A	CN -1574-02.01	ML	Category B		Yes	3			1RN846A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN847A	CN -1574-02.01	ML	Category B		Yes	3			1RN847A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1RN848B	CN -1574-02.05	ML	Category B		Yes	3			1RN848B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1RN849B	CN -1574-02.05	ML	Category B		Yes	3			1RN849B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
1RN854	CN -1574-01.00	SA	Category C		Yes	3			1RN854 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1RN861	CN -1574-02.08	SA	Category C		Yes	3			1RN861 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1RN863	CN -1574-02.08	SA	Category C		Yes	3			1RN863 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN9	CN -1574-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

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
2RN11A	CN -1574-01.00	MO	Category B		Yes	3			2RN11A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN18	CN -1574-01.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2RN20B	CN -1574-01.02	MO	Category B		Yes	3			2RN20B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN28A	CN -1574-01.00	ML	Category B		Yes	3			2RN28A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN30A	CN -1574-01.00	ML	Category B		Yes	3			2RN30A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN38B	CN -1574-01.02	ML	Category B		Yes	3			2RN38B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN40B	CN -1574-01.02	ML	Category B		Yes	3			2RN40B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN47A	CN -1574-01.01	ML	Category B		Yes	3			2RN47A - Stroke Time (Open to Closed)	Tested once quarterly
									2RN47A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN48B	CN -1574-01.01	ML	Category B		Yes	3			2RN48B - Stroke Time (Open to Closed)	Tested once quarterly
									2RN48B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN49A	CN -1574-01.01	ML	Category B		Yes	3			2RN49A - Stroke Time (Open to Closed)	Tested once quarterly
									2RN49A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN50B	CN -1574-01.01	ML	Category B		Yes	3			2RN50B - Stroke Time (Open to Closed)	Tested once quarterly
									2RN50B - Stroke Time (Open to Closed)	Tested every refueling outage

CATAWBA NUCLEAR STAT

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
									Position Indicator (Closed)	Tested once every two years
2RN51A	CN -1574-01.05	ML	Category B		Yes	3			2RN51A - Stroke Time (Open to Closed)	Tested once quarterly
									2RN51A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN52B	CN -1574-01.05	ML	Category B		Yes	3			2RN52B - Stroke Time (Open to Closed)	Tested once quarterly
									2RN52B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN144A	CN -2574-02.00	ML	Category B		Yes	3			2RN144A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN148A	CN -2574-02.00	ML	Category B		Yes	3			2RN148A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN225B	CN -2574-02.04	ML	Category B		Yes	3			2RN225B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN229B	CN -2574-02.04	ML	Category B		Yes	3			2RN229B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN232A	CN -2574-02.01	ML	Category B		Yes	3			2RN232A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN250A	CN -2574-02.01	MR	Category B		Yes	3			2RN250A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN291	CN -2574-02.01	AO	Category B		Yes	3			2RN291 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
2RN292B	CN -2574-02.05	ML	Category B		Yes	3			2RN292B - Stroke Time (Closed to Open)	Tested once quarterly

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Position Indicator (Open)	Tested once every two years
2RN310B	CN -2574-02.05	MR	Category B		Yes	3			2RN310B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN351	CN -2574-02.05	AO	Category B		Yes	3			2RN351 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
									Failed to Safe Position and Timed (Closed to Open)	Tested every refueling outage
2RN404B	CN -2574-02.07	MR	Category B		Yes	2			2RN404B - Stroke Time (Open to Closed)	Tested once quarterly
									2RN404B - Stroke Time (Open to Closed)	Tested every refueling outage
									2RN404B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN405	CN -2574-02.07	SA	Category AC		Yes	2			2RN405 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2RN437B	CN -2574-02.02	MR	Category B		Yes	2		CN-rn02	2RN437B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2RN437B - Stroke Time (Open to Closed)	Tested every refueling outage
									2RN437B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN438	CN -2574-02.02	SA	Category AC		Yes	2			2RN438 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2RN484A	CN -2574-02.02	MR	Category B		Yes	2		CN-rn03	2RN484A - Stroke Time (Open to Closed)	Tested at cold shutdown
									2RN484A - Stroke Time (Open to Closed)	Tested every refueling outage
									2RN484A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN485	CN -2574-02.02	SA	Category AC		Yes	2			2RN485 - Leak Test - Appendix J (Accident	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

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
									Direct)	
									Full Stroke (Both)	Condition Monitoring
2RN487B	CN -2574-02.02	MR	Category B		Yes	2		CN-rn03	2RN487B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2RN487B - Stroke Time (Open to Closed)	Tested every refueling outage
									2RN487B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2RN499	CN -2574-02.03	SA	Category C		Yes	3			2RN499 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN807	CN -2574-02.03	SA	Category C		Yes	3			2RN807 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN815	CN -2574-02.03	SA	Category C		Yes	3			2RN815 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN823	CN -2574-02.03	SA	Category C		Yes	3			2RN823 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN846A	CN -2574-02.01	ML	Category B		Yes	3			2RN846A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN847A	CN -2574-02.01	ML	Category B		Yes	3			2RN847A - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2RN848B	CN -2574-02.05	ML	Category B		Yes	3			2RN848B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2RN849B	CN -2574-02.05	ML	Category B		Yes	3			2RN849B - Stroke Time (Open to Closed)	Tested once quarterly
									Position Indicator (Closed)	Tested once every two years
2RN854	CN -1574-01.00	SA	Category C		Yes	3			2RN854 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN855	CN -1574-01.02	SA	Category C		Yes	3			2RN855 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN861	CN -2574-02.07	SA	Category C		Yes	3			2RN861 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2RN863	CN -2574-02.02	SA	Category C		Yes	3			2RN863 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

SA - MAIN STEAM SUPPLY TO AUX EQ

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1SA1	CN -1593-01.01	MA	Category B		Yes	2			1SA1 - Full Stroke (Closed)	Tested once quarterly
1SA2	CN -1593-01.01	AO	Category B		Yes	2			1SA2 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									1SA2 - Failed to Safe Pos and Timed (Cls to Opn)	Tested every refueling outage
									Failed to Safe Position and Timed (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1SA3	CN -1593-01.01	SA	Category C		Yes	2			1SA3 - Full Stroke (Open)	Condition Monitoring
									1SA3 - Full Stroke (Closed)	Condition Monitoring
1SA4	CN -1593-01.01	MA	Category B		Yes	2			1SA4 - Full Stroke (Closed)	Tested once quarterly
1SA5	CN -1593-01.01	AO	Category B		Yes	2			1SA5 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									1SA5 - Failed to Safe Pos and Timed (Cls to Opn)	Tested every refueling outage
									Failed to Safe Position and Timed (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1SA6	CN -1593-01.01	SA	Category C		Yes	2			1SA6 - Full Stroke (Open)	Condition Monitoring
									1SA6 - Full Stroke (Closed)	Condition Monitoring
2SA1	CN -2593-01.01	MA	Category B		Yes	2			2SA1 - Full Stroke (Closed)	Tested once quarterly
2SA2	CN -2593-01.01	AO	Category B		Yes	2			2SA2 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly
									2SA2 - Failed to Safe Pos and Timed (Cls to Opn)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
2SA3	CN -2593-01.01	SA	Category C		Yes	2			2SA3 - Full Stroke (Open)	Condition Monitoring
									2SA3 - Full Stroke (Closed)	Condition Monitoring
2SA4	CN -2593-01.01	MA	Category B		Yes	2			2SA4 - Full Stroke (Closed)	Tested once quarterly
2SA5	CN -2593-01.01	AO	Category B		Yes	2			2SA5 - Failed to Safe Pos and Timed (Cls to Opn)	Tested every refueling outage
									2SA5 - Failed to Safe Pos and Timed (Cls to Opn)	Tested once quarterly

CATAWBA NUCLEAR STAT

SA - MAIN STEAM SUPPLY TO AUX EQ

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Position Indicator (Open)	Tested once every two years
2SA6	CN -2593-01.01	SA	Category C		Yes	2			2SA6 - Full Stroke (Open)	Condition Monitoring
									2SA6 - Full Stroke (Closed)	Condition Monitoring

CATAWBA NUCLEAR STAT

SM - MAIN STEAM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1SM1	CN -1593-01.00	AO	Category B		Yes	2		CN-sm01	1SM1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1SM1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SM3	CN -1593-01.00	AO	Category B		Yes	2		CN-sm01	Position Indicator (Closed)	Tested once every two years
									1SM3 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1SM3 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
1SM5	CN -1593-01.00	AO	Category B		Yes	2		CN-sm01	1SM5 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1SM5 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SM7	CN -1593-01.00	AO	Category B		Yes	2		CN-sm01	1SM7 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									1SM7 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SM9	CN -1593-01.00	AO	Category B		Yes	2			1SM9 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									1SM9 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years
1SM10	CN -1593-01.00	AO	Category B		Yes	2			1SM10 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									1SM10 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two

CATAWBA NUCLEAR STAT

SM - MAIN STEAM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
										years
									Position Indicator (Closed)	Tested once every two years
1SM11	CN -1593-01.00	AO	Category B		Yes	2			1SM11 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									1SM11 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years
1SM12	CN -1593-01.00	AO	Category B		Yes	2			1SM12 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									1SM12 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years
2SM1	CN -2593-01.00	AO	Category B		Yes	2		CN-sm01	2SM1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2SM1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SM3	CN -2593-01.00	AO	Category B		Yes	2		CN-sm01	2SM3 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2SM3 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SM5	CN -2593-01.00	AO	Category B		Yes	2		CN-sm01	2SM5 - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									2SM5 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SM7	CN -2593-01.00	AO	Category B		Yes	2		CN-sm01	2SM7 - Failed to Safe Pos and Timed (Opn to	Tested at cold shutdown

CATAWBA NUCLEAR STAT

SM - MAIN STEAM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Cls)	
									2SM7 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SM9	CN -2593-01.00	AO	Category B		Yes	2			2SM9 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SM9 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years
2SM10	CN -2593-01.00	AO	Category B		Yes	2			2SM10 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SM10 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years
2SM11	CN -2593-01.00	AO	Category B		Yes	2			2SM11 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SM11 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years
2SM12	CN -2593-01.00	AO	Category B		Yes	2			2SM12 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SM12 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Position Indicator (Open)	Tested once every two years
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

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
1SV1	CN -1593-01.00	AO	Category B		Yes	2			1SV1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SV2	CN -1593-01.00	SA	Category C		Yes	2			1SV2 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV3	CN -1593-01.00	SA	Category C		Yes	2			1SV3 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV4	CN -1593-01.00	SA	Category C		Yes	2			1SV4 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV5	CN -1593-01.00	SA	Category C		Yes	2			1SV5 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV6	CN -1593-01.00	SA	Category C		Yes	2			1SV6 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV7	CN -1593-01.00	AO	Category B		Yes	2			1SV7 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SV8	CN -1593-01.00	SA	Category C		Yes	2			1SV8 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV9	CN -1593-01.00	SA	Category C		Yes	2			1SV9 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV10	CN -1593-01.00	SA	Category C		Yes	2			1SV10 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV11	CN -1593-01.00	SA	Category C		Yes	2			1SV11 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV12	CN -1593-01.00	SA	Category C		Yes	2			1SV12 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV13	CN -1593-01.00	AO	Category B		Yes	2			1SV13 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SV14	CN -1593-01.00	SA	Category C		Yes	2			1SV14 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV15	CN -1593-01.00	SA	Category C		Yes	2			1SV15 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV16	CN -1593-01.00	SA	Category C		Yes	2			1SV16 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

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
1SV17	CN -1593-01.00	SA	Category C		Yes	2			1SV17 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV18	CN -1593-01.00	SA	Category C		Yes	2			1SV18 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV19	CN -1593-01.00	AO	Category B		Yes	2			1SV19 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1SV20	CN -1593-01.00	SA	Category C		Yes	2			1SV20 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV21	CN -1593-01.00	SA	Category C		Yes	2			1SV21 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV22	CN -1593-01.00	SA	Category C		Yes	2			1SV22 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV23	CN -1593-01.00	SA	Category C		Yes	2			1SV23 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV24	CN -1593-01.00	SA	Category C		Yes	2			1SV24 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1SV25B	CN -1593-01.00	ML	Category B		Yes	2			1SV25B - Stroke Time (Open to Closed)	Tested once quarterly
									1SV25B - Stroke Time (Closed to Open)	Tested once quarterly
									1SV25B - Position Indicator (Open)	Tested once every two years
									1SV25B - Position Indicator (Closed)	Tested once every two years
1SV26B	CN -1593-01.00	ML	Category B		Yes	2			1SV26B - Stroke Time (Open to Closed)	Tested once quarterly
									1SV26B - Stroke Time (Closed to Open)	Tested once quarterly
									1SV26B - Position Indicator (Open)	Tested once every two years
									1SV26B - Position Indicator (Closed)	Tested once every two years
1SV27A	CN -1593-01.00	ML	Category B		Yes	2			1SV27A - Stroke Time (Open to Closed)	Tested once quarterly
									1SV27A - Stroke Time (Closed to Open)	Tested once quarterly
									1SV27A - Position Indicator (Open)	Tested once every two years
									1SV27A - Position Indicator (Closed)	Tested once every two years
1SV28A	CN -1593-01.00	ML	Category B		Yes	2			1SV28A - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

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
									1SV28A - Stroke Time (Closed to Open)	Tested once quarterly
									1SV28A - Position Indicator (Open)	Tested once every two years
									1SV28A - Position Indicator (Closed)	Tested once every two years
2SV1	CN -2593-01.00	AO	Category B		Yes	2			2SV1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SV1 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SV2	CN -2593-01.00	SA	Category C		Yes	2			2SV2 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV3	CN -2593-01.00	SA	Category C		Yes	2			2SV3 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV4	CN -2593-01.00	SA	Category C		Yes	2			2SV4 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV5	CN -2593-01.00	SA	Category C		Yes	2			2SV5 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV6	CN -2593-01.00	SA	Category C		Yes	2			2SV6 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV7	CN -2593-01.00	AO	Category B		Yes	2			2SV7 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SV7 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SV8	CN -2593-01.00	SA	Category C		Yes	2			2SV8 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV9	CN -2593-01.00	SA	Category C		Yes	2			2SV9 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV10	CN -2593-01.00	SA	Category C		Yes	2			2SV10 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV11	CN -2593-01.00	SA	Category C		Yes	2			2SV11 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV12	CN -2593-01.00	SA	Category C		Yes	2			2SV12 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV13	CN -2593-01.00	AO	Category B		Yes	2			2SV13 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SV13 - Failed to Safe	Tested every refueling

CATAWBA NUCLEAR STAT

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
									Pos and Timed (Opn to Cls)	outage
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SV14	CN -2593-01.00	SA	Category C		Yes	2			2SV14 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV15	CN -2593-01.00	SA	Category C		Yes	2			2SV15 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV16	CN -2593-01.00	SA	Category C		Yes	2			2SV16 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV17	CN -2593-01.00	SA	Category C		Yes	2			2SV17 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV18	CN -2593-01.00	SA	Category C		Yes	2			2SV18 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV19	CN -2593-01.00	AO	Category B		Yes	2			2SV19 - Failed to Safe Pos and Timed (Opn to Cls)	Tested once quarterly
									2SV19 - Failed to Safe Pos and Timed (Opn to Cls)	Tested every refueling outage
									Failed to Safe Position and Timed (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2SV20	CN -2593-01.00	SA	Category C		Yes	2			2SV20 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV21	CN -2593-01.00	SA	Category C		Yes	2			2SV21 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV22	CN -2593-01.00	SA	Category C		Yes	2			2SV22 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV23	CN -2593-01.00	SA	Category C		Yes	2			2SV23 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV24	CN -2593-01.00	SA	Category C		Yes	2			2SV24 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2SV25B	CN -2593-01.00	MR	Category B		Yes	2			2SV25B - Stroke Time (Open to Closed)	Tested once quarterly
									2SV25B - Stroke Time (Closed to Open)	Tested once quarterly
									2SV25B - Position Indicator (Open)	Tested once every two years
									2SV25B - Position Indicator (Closed)	Tested once every two years
2SV26B	CN -2593-01.00	MR	Category B		Yes	2			2SV26B - Stroke Time (Open to Closed)	Tested once quarterly

CATAWBA NUCLEAR STAT

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
									2SV26B - Stroke Time (Closed to Open)	Tested once quarterly
									2SV26B - Position Indicator (Open)	Tested once every two years
									2SV26B - Position Indicator (Closed)	Tested once every two years
2SV27A	CN -2593-01.00	ML	Category B		Yes	2			2SV27A - Stroke Time (Open to Closed)	Tested once quarterly
									2SV27A - Stroke Time (Closed to Open)	Tested once quarterly
									2SV27A - Position Indicator (Open)	Tested once every two years
									2SV27A - Position Indicator (Closed)	Tested once every two years
2SV28A	CN -2593-01.00	ML	Category B		Yes	2			2SV28A - Stroke Time (Open to Closed)	Tested once quarterly
									2SV28A - Stroke Time (Closed to Open)	Tested once quarterly
									2SV28A - Position Indicator (Open)	Tested once every two years
									2SV28A - Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

VB - BREATHING AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VB83B	CN -1605-03.02	MO	Category A		Yes	2			1VB83B - Stroke Time (Open to Closed)	Tested once quarterly
									1VB83B - Stroke Time (Open to Closed)	Tested every refueling outage
									1VB83B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1VB85	CN -1605-03.02	SA	Category AC		Yes	2			1VB85 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2VB83B	CN -2605-03.02	MO	Category A		Yes	2			2VB83B - Stroke Time (Open to Closed)	Tested once quarterly
									2VB83B - Stroke Time (Open to Closed)	Tested every refueling outage
									2VB83B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2VB85	CN -2605-03.02	SA	Category AC		Yes	2			2VB85 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

VG - D/G ENGINE STARTING AIR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VG5	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1VG6	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1VG7	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1VG8	CN -1609-04.00	SA	Category C		Yes	3			1VG8 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1VG49	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1VG50	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1VG51	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1VG52	CN -1609-04.01	SA	Category C		Yes	3			1VG52 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
1VG133	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1VG134	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1VG135	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1VG136	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2VG5	CN -2609-04.00	SA	Category C		Yes	3			2VG5 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2VG6	CN -2609-04.00	SA	Category C		Yes	3			2VG6 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2VG7	CN -2609-04.00	SA	Category C		Yes	3			2VG7 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2VG8	CN -2609-04.00	SA	Category C		Yes	3			2VG8 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2VG49	CN -2609-04.01	SA	Category C		Yes	3			2VG49 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2VG50	CN -2609-04.01	SA	Category C		Yes	3			2VG50 - Full Stroke (Closed)	Condition Monitoring

CATAWBA NUCLEAR STAT

VG - D/G ENGINE STARTING AIR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Full Stroke (Open)	Condition Monitoring
2VG51	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Open)	Condition Monitoring
									2VG51 - Full Stroke (Closed)	Condition Monitoring
2VG52	CN -2609-04.01	SA	Category C		Yes	3			2VG52 - Full Stroke (Closed)	Condition Monitoring
									Full Stroke (Open)	Condition Monitoring
2VG133	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2VG134	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2VG135	CN -2609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2VG136	CN -2609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

VI - INSTRUMENT AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VI77B	CN -1605-01.04	MO	Category A		Yes	2		CN-vi02	1VI77B - Stroke Time (Open to Closed)	Tested at cold shutdown
									1VI77B - Stroke Time (Open to Closed)	Tested every refueling outage
									1VI77B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1VI79	CN -1605-01.04	SA	Category AC		Yes	2			1VI79 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1VI312A	CN -1605-01.04	ML	Category A		Yes	2			1VI312A - Stroke Time (Open to Closed)	Tested once quarterly
									1VI312A - Stroke Time (Open to Closed)	Tested every refueling outage
									1VI312A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1VI367	CN -1605-01.14	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
1VI368	CN -1605-01.14	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
1VI369	CN -1605-01.14	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
1VI370	CN -1605-01.14	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
1VI373	CN -1605-01.14	SA	Category C		Yes	NA			1VI373 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1VI374	CN -1605-01.14	SA	Category C		Yes	NA			1VI374 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2VI77B	CN -2605-01.05	MO	Category A		Yes	2		CN-vi02	2VI77B - Stroke Time (Open to Closed)	Tested at cold shutdown
									2VI77B - Stroke Time (Open to Closed)	Tested every refueling outage
									2VI77B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2VI79	CN -2605-01.05	SA	Category AC		Yes	2			2VI79 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2VI312A	CN -2605-01.05	ML	Category A		Yes	2			2VI312A - Stroke Time	Tested once quarterly

CATAWBA NUCLEAR STAT

VI - INSTRUMENT AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open to Closed)	
									2VI312A - Stroke Time (Open to Closed)	Tested every refueling outage
									2VI312A - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2VI367	CN -2605-01.05	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
2VI368	CN -2605-01.05	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
2VI369	CN -2605-01.05	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
2VI370	CN -2605-01.05	SA	Category C		Yes	NA			Full Stroke (Both)	Condition Monitoring
2VI373	CN -2605-01.05	SA	Category C		Yes	NA			2VI373 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2VI374	CN -2605-01.05	SA	Category C		Yes	NA			2VI374 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

VP - CONTAINMENT PURGE VENTILATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VP1B	CN -1576-01.00	AO	Category A		Yes	2			1VP1B - Position Indicator (Closed)	Tested once every two years
									1VP1B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP2A	CN -1576-01.00	AO	Category A		Yes	2			1VP2A - Position Indicator (Closed)	Tested once every two years
									1VP2A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP3B	CN -1576-01.00	AO	Category A		Yes	2			1VP3B - Position Indicator (Closed)	Tested once every two years
									1VP3B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP4A	CN -1576-01.00	AO	Category A		Yes	2			1VP4A - Position Indicator (Closed)	Tested once every two years
									1VP4A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP6B	CN -1576-01.00	AO	Category A		No	2			1VP6B - Position Indicator (Closed)	Tested once every two years
									1VP6B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP7A	CN -1576-01.00	AO	Category A		Yes	2			1VP7A - Position Indicator (Closed)	Tested once every two years
									1VP7A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP8B	CN -1576-01.00	AO	Category A		Yes	2			1VP8B - Position Indicator (Closed)	Tested once every two years
									1VP8B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP9A	CN -1576-01.00	AO	Category A		Yes	2			1VP9A - Position Indicator (Closed)	Tested once every two years
									1VP9A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP10A	CN -1576-01.00	AO	Category A		Yes	2			1VP10A - Position Indicator (Closed)	Tested once every two years
									1VP10A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP11B	CN -1576-01.00	AO	Category A		Yes	2			1VP11B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									1VP11B - Position	Tested once every two

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Closed)	years
1VP12A	CN -1576-01.00	AO	Category A		Yes	2			1VP12A - Position Indicator (Closed)	Tested once every two years
									1VP12A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP13B	CN -1576-01.00	AO	Category A		Yes	2			1VP13B - Position Indicator (Closed)	Tested once every two years
									1VP13B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP15A	CN -1576-01.00	AO	Category A		Yes	2			1VP15A - Position Indicator (Closed)	Tested once every two years
									1VP15A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP16B	CN -1576-01.00	AO	Category A		Yes	2			1VP16B - Position Indicator (Closed)	Tested once every two years
									1VP16B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP17A	CN -1576-01.00	AO	Category A		Yes	2			1VP17A - Position Indicator (Closed)	Tested once every two years
									1VP17A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP18B	CN -1576-01.00	AO	Category A		Yes	2			1VP18B - Position Indicator (Closed)	Tested once every two years
									1VP18B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VP19A	CN -1576-01.00	AO	Category A		Yes	2			1VP19A - Position Indicator (Closed)	Tested once every two years
									1VP19A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
1VP20B	CN -1576-01.00	AO	Category A		Yes	2			1VP20B - Position Indicator (Closed)	Tested once every two years
									1VP20B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP1B	CN -2576-01.00	AO	Category A		Yes	2			2VP1B - Position Indicator (Closed)	Tested once every two years
									2VP1B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP2A	CN -2576-01.00	AO	Category A		Yes	2			2VP2A - Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

VP - CONTAINMENT PURGE VENTILATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									2VP2A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP3B	CN -2576-01.00	AO	Category A		Yes	2			2VP3B - Position Indicator (Closed)	Tested once every two years
									2VP3B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP4A	CN -2576-01.00	AO	Category A		Yes	2			2VP4A - Position Indicator (Closed)	Tested once every two years
									2VP4A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP6B	CN -2576-01.00	AO	Category A		Yes	2			2VP6B - Position Indicator (Closed)	Tested once every two years
									2VP6B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP7A	CN -2576-01.00	AO	Category A		Yes	2			2VP7A - Position Indicator (Closed)	Tested once every two years
									2VP7A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP8B	CN -2576-01.00	AO	Category A		Yes	2			2VP8B - Position Indicator (Closed)	Tested once every two years
									2VP8B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP9A	CN -2576-01.00	AO	Category A		Yes	2			2VP9A - Position Indicator (Closed)	Tested once every two years
									2VP9A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP10A	CN -2576-01.00	AO	Category A		Yes	2			2VP10A - Position Indicator (Closed)	Tested once every two years
									2VP10A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP11B	CN -2576-01.00	AO	Category A		Yes	2			2VP11B - Position Indicator (Closed)	Tested once every two years
									2VP11B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP12A	CN -2576-01.00	AO	Category A		Yes	2			2VP12A - Position Indicator (Closed)	Tested once every two years
									2VP12A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP13B	CN -2576-01.00	AO	Category A		Yes	2			2VP13B - Position	Tested once every two

VP - CONTAINMENT PURGE VENTILATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									Indicator (Closed)	years
									2VP13B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP15A	CN -2576-01.00	AO	Category A		Yes	2			2VP15A - Position Indicator (Closed)	Tested once every two years
									2VP15A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP16B	CN -2576-01.00	AO	Category A		Yes	2			2VP16B - Position Indicator (Closed)	Tested once every two years
									2VP16B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP17A	CN -2576-01.00	AO	Category A		Yes	2			2VP17A - Position Indicator (Closed)	Tested once every two years
									2VP17A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP18B	CN -2576-01.00	AO	Category A		Yes	2			2VP18B - Position Indicator (Closed)	Tested once every two years
									2VP18B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VP19A	CN -2576-01.00	AO	Category A		Yes	2			2VP19A - Position Indicator (Closed)	Tested once every two years
									2VP19A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
2VP20B	CN -2576-01.00	AO	Category A		Yes	2			2VP20B - Position Indicator (Closed)	Tested once every two years
									2VP20B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage

CATAWBA NUCLEAR STAT

VQ - CONT AIR RELEASE/ADDITION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VQ2A	CN -1585-01.00	MO	Category A		Yes	2			1VQ2A - Stroke Time (Open to Closed)	Tested once quarterly
									1VQ2A - Stroke Time (Open to Closed)	Tested every refueling outage
									1VQ2A - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1VQ3B	CN -1585-01.00	MR	Category A		Yes	2			1VQ3B - Stroke Time (Open to Closed)	Tested once quarterly
									1VQ3B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1VQ15B	CN -1585-01.00	MR	Category A		Yes	2			1VQ15B - Stroke Time (Open to Closed)	Tested once quarterly
									1VQ15B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1VQ16A	CN -1585-01.00	MO	Category A		Yes	2			1VQ16A - Stroke Time (Open to Closed)	Tested once quarterly
									1VQ16A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
									Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2VQ2A	CN -2585-01.00	MO	Category A		Yes	2			2VQ2A - Stroke Time (Open to Closed)	Tested once quarterly
									2VQ2A - Stroke Time (Open to Closed)	Tested every refueling outage
									2VQ2A - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2VQ3B	CN -2585-01.00	MR	Category A		Yes	2			2VQ3B - Stroke Time (Open to Closed)	Tested once quarterly
									2VQ3B - Stroke Time	Tested every refueling

VQ - CONT AIR RELEASE/ADDITION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
									(Open to Closed)	outage
									2VQ3B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2VQ15B	CN -2585-01.00	MR	Category A		Yes	2			2VQ15B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									2VQ15B - Stroke Time (Open to Closed)	Tested once quarterly
									2VQ15B - Stroke Time (Open to Closed)	Tested every refueling outage
2VQ16A	CN -2585-01.00	MO	Category A		Yes	2			2VQ16A - Stroke Time (Open to Closed)	Tested once quarterly
									2VQ16A - Stroke Time (Open to Closed)	Tested every refueling outage
									2VQ16A - Leak Test - Appendix J (Reverse Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

VS - STATION AIR SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VS54B	CN -1605-02.01	MR	Category A		Yes	2			1VS54B - Stroke Time (Open to Closed)	Tested once quarterly
									1VS54B - Stroke Time (Open to Closed)	Tested every refueling outage
									1VS54B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1VS56	CN -1605-02.01	SA	Category AC		Yes	2			1VS56 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2VS54B	CN -1605-02.01	MR	Category A		Yes	2			2VS54B - Stroke Time (Open to Closed)	Tested once quarterly
									2VS54B - Stroke Time (Open to Closed)	Tested every refueling outage
									2VS54B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2VS56	CN -1605-02.01	SA	Category AC		Yes	2			2VS56 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

VX - CONT AIR RTN EXCH & HYD SKIM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VX1A	CN -1557-01.00	ML	Category B		Yes	2			1VX1A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
1VX2B	CN -1557-01.00	ML	Category B		Yes	2			1VX2B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2VX1A	CN -2557-01.00	ML	Category B		Yes	2			2VX1A - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years
2VX2B	CN -2557-01.00	ML	Category B		Yes	2			2VX2B - Stroke Time (Closed to Open)	Tested once quarterly
									Position Indicator (Open)	Tested once every two years

CATAWBA NUCLEAR STAT

VY - CONT HYD SAMPLE AND PURGE

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VY15B	CN -1559-01.00	MR	Category A		Yes	2			1VY15B - Position Indicator (Closed)	Tested once every two years
									1VY15B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VY16	CN -1559-01.00	SA	Category AC		Yes	2			1VY16 - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Full Stroke (Both)	Condition Monitoring
1VY17A	CN -1559-01.00	MR	Category A		Yes	2			1VY17A - Position Indicator (Closed)	Tested once every two years
									1VY17A - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
1VY18B	CN -1559-01.00	MR	Category A		Yes	2			1VY18B - Position Indicator (Closed)	Tested once every two years
									1VY18B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VY15B	CN -2559-01.00	MR	Category A		Yes	2			2VY15B - Position Indicator (Closed)	Tested once every two years
									2VY15B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VY16	CN -2559-01.00	SA	Category AC		Yes	2			2VY16 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2VY17A	CN -2559-01.00	MR	Category A		Yes	2			2VY17A - Position Indicator (Closed)	Tested once every two years
									2VY17A - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
2VY18B	CN -2559-01.00	MR	Category A		Yes	2			2VY18B - Position Indicator (Closed)	Tested once every two years
									2VY18B - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage

CATAWBA NUCLEAR STAT

WE - EQUIPMENT DECONTAMINATION

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1WE20	CN -1568-01.00	MA	Category A		Yes	2			1WE20 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
1WE22	CN -1568-01.00	MA	Category A		Yes	2			1WE22 - Leak Test - Appendix J (Reverse Direct)	10CFR50, App J, Opt B
2WE20	CN -2568-01.00	MA	Category A		Yes	2			2WE20 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
2WE22	CN -2568-01.00	MA	Category A		Yes	2			2WE22 - Leak Test - Appendix J (Reverse Direct)	10CFR50, App J, Opt B

CATAWBA NUCLEAR STAT

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
1WL321	CN -1565-02.04	SA	Category AC		Yes	2			1WL321 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1WL450A	CN -1565-02.00	ML	Category A		Yes	2			1WL450A - Stroke Time (Open to Closed)	Tested once quarterly
									1WL450A - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL450A - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1WL451B	CN -1565-02.00	ML	Category A		Yes	2			1WL451B - Stroke Time (Open to Closed)	Tested once quarterly
									1WL451B - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL451B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1WL462	CN -1565-02.00	SA	Category C		Yes	3			1WL462 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1WL805A	CN -1565-02.00	MR	Category B		Yes	2			1WL805A - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL805A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
									1WL805A - Stroke Time (Open to Closed)	Tested once quarterly
1WL806	CN -1565-02.00	SA	Category AC		Yes	2			1WL806 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1WL807B	CN -1565-02.00	MR	Category B		Yes	2			1WL807B - Stroke Time (Open to Closed)	Tested once quarterly
									1WL807B - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL807B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1WL825A	CN -1565-02.04	MR	Category B		Yes	2			1WL825A - Stroke Time (Open to Closed)	Tested once quarterly
									1WL825A - Stroke Time (Open to Closed)	Tested every refueling outage

CATAWBA NUCLEAR STAT

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
									1WL825A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1WL826	CN -1565-02.04	SA	Category C		Yes	3			1WL826 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1WL827B	CN -1565-02.04	MR	Category B		Yes	2			1WL827B - Stroke Time (Open to Closed)	Tested once quarterly
									1WL827B - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL827B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1WL830	CN -1565-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1WL832	CN -1565-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1WL867A	CN -1565-02.01	MR	Category B		Yes	2			1WL867A - Stroke Time (Open to Closed)	Tested once quarterly
									1WL867A - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL867A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1WL868	CN -1565-02.01	SA	Category AC		Yes	2			1WL868 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
1WL869B	CN -1565-02.01	MR	Category B		Yes	2			1WL869B - Stroke Time (Open to Closed)	Tested once quarterly
									1WL869B - Stroke Time (Open to Closed)	Tested every refueling outage
									1WL869B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1WL894	CN -1565-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
1WLA21	CN -1565-02.06	MA	Category B		Yes	2			1WLA21 - Leak Test Using NW System	Tested every refueling outage
									Full Stroke (Both)	Tested every refueling outage
1WLA22	CN -1565-02.06	SA	Category AC		Yes	2			1WLA22 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring

CATAWBA NUCLEAR STAT

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
1WLA24	CN -1565-02.06	MA	Category B		Yes	2			1WLA24 - Leak Test Using NW System	Tested every refueling outage
									Full Stroke (Both)	Tested every refueling outage
1WLA33	CN -1565-02.06	SA	Category C		Yes	3			1WLA33 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2WL321	CN -2565-02.04	SA	Category AC		Yes	2			2WL321 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2WL450A	CN -2565-02.00	ML	Category A		Yes	2			2WL450A - Stroke Time (Open to Closed)	Tested once quarterly
									2WL450A - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL450A - Leak Test - Appendix J (Accident Direct)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2WL451B	CN -2565-02.00	ML	Category A		Yes	2			2WL451B - Stroke Time (Open to Closed)	Tested once quarterly
									2WL451B - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL451B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2WL462	CN -2565-02.00	SA	Category C		Yes	3			2WL462 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2WL805A	CN -2565-02.00	MR	Category B		Yes	2			2WL805A - Stroke Time (Open to Closed)	Tested once quarterly
									2WL805A - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL805A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2WL806	CN -2565-02.00	SA	Category AC		Yes	2			2WL806 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2WL807B	CN -2565-02.00	MR	Category B		Yes	2			2WL807B - Stroke Time (Open to Closed)	Tested once quarterly
									2WL807B - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL807B - Leak Test Using NW System	Tested every refueling outage

CATAWBA NUCLEAR STAT

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
									Position Indicator (Closed)	Tested once every two years
2WL825A	CN -2565-02.04	MR	Category B		Yes	2			2WL825A - Stroke Time (Open to Closed)	Tested once quarterly
									2WL825A - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL825A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2WL826	CN -2565-02.04	SA	Category C		Yes	3			2WL826 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2WL827B	CN -2565-02.04	MR	Category B		Yes	2			2WL827B - Stroke Time (Open to Closed)	Tested once quarterly
									2WL827B - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL827B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2WL830	CN -2565-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2WL832	CN -2565-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2WL867A	CN -2565-02.01	MR	Category B		Yes	2			2WL867A - Stroke Time (Open to Closed)	Tested once quarterly
									2WL867A - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL867A - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2WL868	CN -2565-02.01	SA	Category AC		Yes	2			2WL868 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2WL869B	CN -2565-02.01	MR	Category B		Yes	2			2WL869B - Stroke Time (Open to Closed)	Tested once quarterly
									2WL869B - Stroke Time (Open to Closed)	Tested every refueling outage
									2WL869B - Leak Test Using NW System	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
2WL894	CN -2565-02.02	SA	Category C		Yes	3			Full Stroke (Both)	Condition Monitoring
2WLA21	CN -2565-02.06	MA	Category B		Yes	2			2WLA21 - Leak Test Using NW System	Tested every refueling outage

CATAWBA NUCLEAR STAT

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
									Full Stroke (Both)	Tested every refueling outage
2WLA22	CN -2565-02.06	SA	Category AC		Yes	2			2WLA22 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2WLA24	CN -2565-02.06	MA	Category B		Yes	2			2WLA24 - Leak Test Using NW System	Tested every refueling outage
									Full Stroke (Both)	Tested every refueling outage
2WLA33	CN -2565-02.06	SA	Category C		Yes	3			2WLA33 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule

CATAWBA NUCLEAR STAT

YC - CONTROL AREA CHILLED WATER

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1YC65	CN -1578-02.00	SA	Category C		Yes	3			1YC65 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1YC77A	CN -1578-02.00	MR	Category B		Yes	3			1YC77A - Stroke Time (Open to Closed)	Tested once quarterly
									1YC77A - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years
1YC108	CN -1578-02.02	SA	Category C		Yes	3			1YC108 - Full Stroke (Open)	Condition Monitoring
									Full Stroke (Closed)	Condition Monitoring
1YC121B	CN -1578-02.02	MR	Category B		Yes	3			1YC121B - Stroke Time (Open to Closed)	Tested once quarterly
									1YC121B - Stroke Time (Open to Closed)	Tested every refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

YM - MAKE-UP DEMINERALIZED WATER

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1YM119B	CN -1601-03.01	ML	Category A		Yes	2			1YM119B - Stroke Time (Open to Closed)	Tested once quarterly
									1YM119B - Stroke Time (Open to Closed)	Tested every refueling outage
									1YM119B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
1YM121	CN -1601-03.01	SA	Category AC		Yes	2			1YM121 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring
2YM119B	CN -1601-03.01	ML	Category A		Yes	2			2YM119B - Stroke Time (Open to Closed)	Tested once quarterly
									2YM119B - Stroke Time (Open to Closed)	Tested every refueling outage
									2YM119B - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Position Indicator (Closed)	Tested once every two years
2YM121	CN -1601-03.01	SA	Category AC		Yes	2			2YM121 - Leak Test - Appendix J (Accident Direct)	10CFR50, App J, Opt B
									Full Stroke (Both)	Condition Monitoring

DUKE POWER

CATAWBA NUCLEAR STATION

RELIEF REQUEST

Section 5.0

5.1 PUMP GENERIC RELIEF REQUESTS

Relief Request	Applicability	Status
None		

5.2 PUMP SPECIFIC RELIEF REQUESTS

Relief Request	Applicability	Status
CN-SRP-CA-01	Auxiliary Feedwater Pumps	Revised 8/1/06

10CFR50.55a Request Number CN-SRP-CA-01

Information to Support NRC Re-Approval of a 10 CFR 50.55a Request For Use During a New 10-Year Interval Inservice Testing Program,

1. Previous 10CFR50.55a Request Approved by NRC

Relief was previously requested and granted to use Auxiliary Feedwater System (CA) pump suction pressure analog gauges that exceed the "full scale range shall not be greater than 3 times the reference value" criteria. The original code from which relief was granted was ASME OMa-1988, section 4.6.1.2(a). The applicable code for this update is ASME OMb-2000; section ISTB 3510(b)(1). The instruments affected are:

1(2)CAPG5020	1A/2A Auxiliary Feedwater Pump Suction Pressure Gauge
1(2)CAPG5030	1B/2B Auxiliary Feedwater Pump Suction Pressure Gauge

The request was submitted by Duke on December 28, 1995 and received approval from the NRC on May 16, 1996. Reference TAC Nos. M94409 and M94410.

2. Changes to the Applicable ASME Code Section

The code section has changed due to various code updates since the original relief request. The original code date and section was ASME OMa-1988, section 4.6.1.2(a). The new code section is ASME OMb-2000; section ISTB 3510(b)(1). The section numbers have changed, but the actual instrumentation code requirements are unchanged.

3. Component Aging Factors

Aging factors were not considered for this request. Instrumentation is not obsolete, and is part of the instrument calibration program which insures instrumentation remains calibrated. Any indication instruments will not maintain calibration or drift excessively would prompt a review for instrument replacement.

4. Changes in Technology for Testing the Affected ASME Code Components

This request would not be affected by technology changes. The instrumentation requirements are the same from the previous submittal to this submittal. Instruments do not meet the full scale requirements; however, the ability to obtain meaningful data is not compromised.

5. Confirmation of Renewed Applicability

Request the use of local suction pressure gauges during performance of CA pump Inservice Tests. There are two sets of gauges available to read CA pump suction

pressure, one local and one remote (control room). The local gauges do not meet the code required limit of no more than 3 times the reference value for the full scale reading of the gauge. The local gauge is the preferred location for reading the suction pressure during performance testing.

The installed process instrumentation for the CA pump suction pressure measurement is as follows:

Pump	Local	Control Room
1A/2A	0-160 psig (0.5% error)	0-90 psig (1.12% error)
1B/2B	0-160 psig (0.5% error)	0-90 psig (1.12% error)

The typical range of values for the suction pressure of the CA pumps during testing is 33-38 psig; therefore, the local process instrumentation on CA Pumps 1A/2A and 1B/2B does not meet the three times criteria. The accuracy of the process instrumentation (0.5%) is well below the requirements specified in OMa-1999; subsection ISTB, Table ISTB-3500-1 for pressure instrumentation accuracy (2.0%). The actual reading error at test pressure due to the process instrumentation accuracy is, 0.5% * 160/33 = 2.42%. If a 0-90 psig test instrument is used (which meets the three times criteria) and it has an accuracy of 2.0%, then the reading error due to instrument accuracy would be, 2% * 90/33 = 5.45%. When the requirements of OMb-2000, Subsection ISTB Part 6, Section ISTB-3500, Data Collection, and Table 3500-1 are compared, the actual instrument error introduced to the test is less than the code allowable (2.42% vs. 5.45%). 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.

For total error measurement, the accuracy of the loop should be considered. The error could then be calculated by the Square Root Sum of the Square (SRSS) method. As the same discharge pressure gauge is used, the difference in error using the SRSS method would be a function of the different suction pressure gauges used. Focusing on the suction pressure gauges alone, the quality of the test data when using either suction pressure gauge is not compromised.

6. Duration of Re-Approved 10CFR50.55a Request

Duration for this request is for the third 10 year interval beginning August 19, 2005.

5.3 VALVE GENERIC RELIEF REQUESTS

Relief Request	Applicability	Status
None		

5.4 VALVE SPECIFIC RELIEF REQUESTS

Relief Request	Applicability	Status
None		

DUKE POWER

CATAWBA NUCLEAR STATION

JUSTIFICATION FOR DEFERRAL

Section 6.0

Justification for Deferral

Item Number:	CN-CA-05
Valve:	2CA0149, 2CA0150, 2CA0151, 2CA0152
Flow Diagram:	CN-2592-1.1
Code Category:	B
ASME Class:	2
Function:	Close on Feedwater Isolation signal and Phase "A" Containment Isolation signal.
Test Requirement:	Measure Full Stroke Time/Failed to Safe Position – Quarterly Exercise valve (full stroke) to the position required to fulfill its function every three months, test valve for fail safe actuation every three months, and stroke time valves (full stroke) every three months.
Basis for Deferral:	The Westinghouse D-5 steam generator design requires these valves to be used for a portion of the main Feedwater flow during power operation. Closing these valves at 100% power would isolate this flow, possibly resulting in preheater damage.
Test Alternative & Frequency:	These valves will be: exercised (full stroke) during cold shutdown, tested for fail safe actuation during cold shutdown, and stroke timed tested during cold shutdown.

Justification for Deferral

Item Number:	CN-CF-01
Valve:	1CF0033, 1CF0042, 1CF0051, 1CF0060 2CF0033, 2CF0042, 2CF0051, 2CF0060
Flow Diagram:	CN-1591-1.1 CN-2591-1.1
Code Category:	B
ASME Class:	2
Function:	Isolates main feedwater piping from the steam generators upon receipt of a feedwater isolation signal.
Test Requirement:	Measure Full Stroke Time/Failed to Safe Position – Quarterly Exercise valve (full stroke) to the position required to fulfill its function, observe fail-safe operation, and stroke time every 3 months.
Basis for Deferral:	Closing these valves during power operation is considered impractical from an operating viewpoint. Closure would isolate feedwater to the steam generator which would result in a severe transient in the steam generator, causing a unit trip.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function, fail-safe operation verified, and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-CF-04
Valve:	1CF0028, 1CF0037, 1CF0046, 1CF0055 2CF0028, 2CF0037, 2CF0046, 2CF0055
Flow Diagram:	CN-1591-1.1 CN-2591-1.1
Code Category:	B
ASME Class:	3
Function:	Control valves normally modulated by the Digital Feedwater Control System (DFCS) to maintain proper steam generator water level. Automatic closure will occur upon transfer to the auxiliary shutdown panel, an inboard doghouse Hi-Hi water level, or a feedwater isolation signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function every 3 months.
Basis for Deferral:	Closing these valves during power operation is considered impractical from an operating viewpoint. Closure would reduce feedwater to the steam generators which would result in a severe transient in the steam generator, causing a unit trip.
Test Alternative & Frequency:	Valves will be exercised (full stroke) to the closed position and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-CF-05
Valve:	1CF0030, 1CF0039, 1CF0048, 1CF0057 2CF0030, 2CF0039, 2CF0048, 2CF0057
Flow Diagram:	CN-1591-1.1 CN-2591-1.1
Code Category:	B
ASME Class:	ANSI B31.1 (Class F)
Function:	Bypass control valves normally modulated by the Digital Feedwater Control System (DFCS) to maintain proper steam generator water level. Automatic closure will occur upon transfer to the auxiliary shutdown panel, an inboard doghouse Hi-Hi water level, or a feedwater isolation signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function every 3 months.
Basis for Deferral:	Closing these valves during power operation is considered impractical from an operating viewpoint. Closure would reduce feedwater to the steam generators which may result in a severe transient in the steam generator, possibly causing a unit trip.
Test Alternative & Frequency:	Valves will be exercised (full stroke) to the closed position and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-KC-01
Valve:	1KC320A, 1KC332B, 1KC333A 2KC320A, 2KC332B, 2KC333A
Flow Diagram:	CN-1573-1.3 CN-2573-1.3
Code Category:	B
ASME Class:	2
Function:	Isolates flow to the reactor coolant drain tank heat exchanger upon receipt of a high containment pressure signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of one of these valves in the closed position during testing would inhibit the flow path through the reactor coolant drain tank heat exchanger. This would result in boiling of the water in the reactor coolant drain tank resulting in excess heat in containment. This increased heat load could cause unit shutdown due to exceeding Tech Spec containment temperature limits.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-KC-02
Valve:	1KC0338B, 1KC0424B, 1KC0425A 2KC0338B, 2KC0424B, 2KC0425A
Flow Diagram:	CN-1573-1.3 CN-2573-1.3
Code Category:	B
ASME Class:	2
Function:	Isolates flow to the reactor coolant pump motor bearing coolers, and reactor coolant pump thermal barriers, upon receipt of a high-high containment pressure signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of these valves in the closed position during testing would inhibit flow to the reactor coolant pump motor bearing coolers, and reactor coolant pump thermal barriers. This action could result in unit shutdown and possible damage to the vessel and reactor coolant pumps.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NC-02
Valve:	1NC0032B, 1NC0034A, 1NC0036B 2NC0032B, 2NC0034A, 2NC0036B
Flow Diagram:	CN-1553-1.1 CN-2553-1.1
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/Failed to Safe Position – Quarterly Stroke time and observe fail-safe operation every three (3) months.
Basis for Deferral:	PORVS do not serve a safety function when unit is at operating temperature and pressure. PORVs protect the Reactor Coolant System from over pressurization during LTOP conditions 1(2)NC0032B & 1(2)NC0034A only. Also according to NRC Branch Technical Position RSB5-2 the full stroke exercise should take place during cold shutdown vs. quarterly during power operations due to the high probability of sticking open. Tech Spec prevents Catawba from performing the surveillance test in Modes 1 and 2.
Test Alternative & Frequency:	Stroke time testing and fail-safe observation will be performed at cold shutdown for 1(2)NC0032B, 1(2)NC0034A, & 1(2)NC0036B; and in all cases prior to entering LTOP conditions in accordance with Generic Letter 90-06 for 1(2)NC0032B & 1(2)NC0034A. Testing will not be required more often than once per quarter as defined in ASME OMb-2000, Section ISTC 3510.

Justification for Deferral

Item Number:	CN-NC-03
Valve:	1NC0250A, 1NC0251B, 1NC0252B, 1NC0253A 2NC0250A, 2NC0251B, 2NC0252B, 2NC0253A
Flow Diagram:	CN-1553-1.1 CN-2553-1.1
Code Category:	B
ASME Class:	1
Function:	Reactor vessel head vent.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve full-stroke to position required to fulfill its function and stroke time every three months.
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 cycled and timed during cold shutdown.

Justification for Deferral

Item Number:	CN-ND-01
Valve:	1ND0001B, 1ND0002A 2ND0001B, 2ND0002A
Flow Diagram:	CN-1561-1.0 CN-2561-1.0
Code Category:	A
ASME Class:	1
Function:	Valves open to provide suction to Residual Heat Removal Pump A during normal unit cooldown.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	These valves have been provided with an interlock which prevents their opening when Reactor Coolant System pressure is above approximately 425 PSIG.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-ND-02
Valve:	1ND0036B, 1ND0037A 2ND0036B, 2ND0037A
Flow Diagram:	CN-1561-1.1 CN-2561-1.1
Code Category:	A
ASME Class:	1
Function:	Valves open to provide suction to Residual Heat Removal Pump B during normal unit cooldown.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	These valves have been provided with an interlock which prevents their opening when Reactor Coolant System pressure is above approximately 425 PSIG.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-ND-04
Valve:	1ND0032A, 1ND0065B 2ND0032A, 2ND0065B
Flow Diagram:	CN-1561-1.0, CN-1561-1.1 CN-2561-1.0, CN-2561-1.1
Code Category:	B
ASME Class:	2
Function:	Cross connect cold leg injection flow path from the two trains of residual heat removal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (Full Stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Based on Engineering and Westinghouse evaluation, closing one of these valves renders both trains of residual heat removal inoperable. This is not allowed by Technical Specification in Modes 1-3 since both trains are required to be operable. Technical Specification requires one train of ND to be operable in Mode 4.
Test Alternative & Frequency:	Valves will be exercised (Full Stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-ND-05
Valve:	1ND0028A 2ND0028A
Flow Diagram:	CN-1561-1.0 CN-2561-1.0
Code Category:	B
ASME Class:	2
Function:	Residual Heat Removal pump supply to NV and NI pumps.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Opening valve provides flow path from FWST to suction of centrifugal charging pumps. This could result in a plant transient due to an increase in RCS Boron inventory.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-01
Valve:	1NI0009A, 1NI0010B 2NI0009A, 2NI0010B
Flow Diagram:	CN-1562-1.0 CN-2562-1.0
Code Category:	B
ASME Class:	2
Function:	Opens to allow flow from centrifugal charging pump discharge to reactor coolant loop cold leg.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (Full Stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Exercising these valves quarterly during power operations would result in flow of non-preheated water through the injection lines and thermal shocking of the injection nozzles.
Test Alternative & Frequency:	Valve will be exercised (Full Stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-08
Valve:	1NI0100B 2NI0100B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Provides suction for both trains of safety injection pumps from the refueling water storage tank.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of this valve in the closed position during testing would render both trains of safety injection pumps inoperable.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-09
Valve:	1NI0147B 2NI0147B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Valve is normally open to provide miniflow path to the refueling water storage tank.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of this valve in the closed position during testing would result in loss of miniflow path for both trains of safety injection pumps. This would result in pump damage due to dead heading the safety injection pumps in the event of a safety injection signal with reactor coolant pressure above 1520 psig (Safety Injection Pump Discharge Pressure).
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-12
Valve:	1NI0162A 2NI0162A
Flow Diagram:	CN-1562-1.3 CN-2562-1.3
Code Category:	B
ASME Class:	2
Function:	Valve is normally open to provide cold leg injection flow from both trains of safety injection pumps.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of this valve in the closed position during testing would result in loss of cold leg injection flow from the safety injection pumps rendering both trains of safety injection inoperable.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-15
Valve:	1NI0173A, 1NI0178B 2NI0173A, 2NI0178B
Flow Diagram:	CN-1562-1.3 CN-2562-1.3
Code Category:	B
ASME Class:	2
Function:	Each valve isolates two of the four cold leg injection flow paths from the residual heat removal discharge crossover line.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise (Full Stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Based on Engineering and Westinghouse evaluation, closing one of these valves renders both trains of residual heat removal inoperable. This is not allowed by Technical Specification in Modes 1-3 since both trains are required to be operable. Technical Specification requires one train of ND to be operable in Mode 4.
Test Alternative & Frequency:	Valves will be exercised (Full Stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-16
Valve:	1NI0183B 2NI0183B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Opens to align hot leg injection during recirculation phase following safety injection actuation.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (Full Stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Based on Engineering and Westinghouse evaluation, in order for a train of ND to be operable to perform its ECCS function, it must be able to discharge into all four cold leg injection lines. This is in the event of single train failure. With this additional valve open, one ND pump could then be aligned to all four cold leg injection paths plus two hot leg paths during an ECCS actuation possibly resulting in a pump run out condition.
Test Alternative & Frequency:	Valve will be exercised (Full Stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-17
Valve:	1NI0184B, 1NI0185A 2NI0184B, 2NI0185A
Flow Diagram:	CN-1562-1.3 CN-2562-1.3
Code Category:	B
ASME Class:	2
Function:	Opens to provide flow from the Containment Sump to the suction of Residual Heat Removal and Containment Spray Pumps during post accident recirculation phase.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (Full Stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	To prevent water from entering lower containment when cycling these valves, piping downstream must be drained. This results in making one train of ECCS inoperable for an extended period of time until completion of the test, refilling the piping and realignment of isolation valves. Also, the large amount of potentially contaminated water that must be drained is a major Health Physics and Radwaste Chemistry problem.
Test Alternative & Frequency:	Valve will be exercised (Full Stroke) to the position required to fulfill its function and stroke time during Cold Shutdown.

Justification for Deferral

Item Number:	CN-NI-18
Valve:	1NI0332A, 1NI0333B 2NI0332A, 2NI0333B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Aligns discharge of ND Pump 1A to suction of NI and NV Pumps.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	If one of these valves were to fail in the open position during testing, the FWST would be aligned to the suction of the charging pumps. This could result in an increase in RCS Boron inventory and could result in plant shutdown. In addition, NI334B cannot be closed since it would degrade both trains of safety injection (see JFD NI-23).
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its safety function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-19
Valve:	1NI0136B 2NI0136B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Valve is opened for the recirculation phase of ECCS operation to allow flow from the residual heat removal pumps to the safety injection pumps.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (Full Stroke) to the position required to fulfill its function and stroke time every three months.
Basis for Deferral:	Based on Engineering evaluation, opening this valve during power operation could degrade ND system flow in the event of a Large Break LOCA.
Test Alternative & Frequency:	Valve will be exercised (Full Stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-23
Valve:	1NI0334B, 2NI0334B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
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 Exercise valve full-stroke to position required to fulfill its function and stroke time every three months.
Basis for Deferral:	Closing this valve during power operation degrades both trains of Safety Injection. With the single failure of Train B diesel generator, Train A of Safety Injection, which is provided suction from Residual Heat Removal via NI0334B or NI0136B, would be inoperable (since NI0136B is normally closed). Train B of Safety Injection would already be inoperable due to the single failure.
Test Alternative & Frequency:	These valves will be exercised (full-stroked) to position to fulfill its function during cold shutdown..

Justification for Deferral

Item Number:	CN-NI-24
Valve:	1NI0103A, 2NI0103A
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Provides flow from the Refueling Water Storage Tank to the A Train Safety Injection Pump suction. This valve also provides a flow path from the B Train Residual Heat Removal Pump to the A Train Safety Injection Pump and both Centrifugal Charging Pumps.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve full-stroke to position required to fulfill its function and stroke time every three months.
Basis for Deferral:	Closing this valve during power operations degrades both trains of the Chemical and Volume Control System. In the event of a loss of offsite power with the loss of the Train A Diesel Generator as the single failure when the valve was closed, B Train NV would be lost for sump recirculation mode of operation. Train A NV would already be inoperable due to the single failure.
Alternate Testing & Frequency:	These valves will be exercised (full-stroked) to position to fulfill its function during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-25
Valve:	1NI0054A, 1NI0065B, 1NI0076A, 1NI0088B 2NI0054A, 2NI0065B, 2NI0076A, 2NI0088B
Flow Diagram:	CN-1562-1.1 CN-2562-1.1
Code Category:	B
ASME Class:	2
Function:	Valve is administratively open with power removed during normal operation. Some accidents require closure of these valves to prevent injecting nitrogen into the NC System.
Test Requirement:	Measure Full Stroke Time - Quarterly Exercise valve full stroke to the position required to fulfill its function and stroke time every three months.
Basis for Deferral:	Valves cannot be full or partial stroke exercised during power operations since closure of any of the four valves violates TS 3.5.1.
Test Alternative & Frequency:	These valves will be exercised (closed) to the position to fulfill their function during refueling.

Justification for Deferral

Item Number:	CN-NS-03
Valve:	1NS0038B, 1NS0043A 2NS0038B, 2NS0043A
Flow Diagram:	CN-1563-1.0 CN-2563-1.0
Code Category:	B
ASME Class:	2
Function:	Residual Heat Pump A (and B) to Containment Spray Header Containment Isolation Valve.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve full-stroke to position required to fulfill its function and stroke time every three months.
Basis for Deferral:	If an accident occurred with one of these valves open, injection flow would be diverted from both trains of the ND System.
Test Alternative & Frequency:	Valves will be exercised (full stroke) to the position required to fulfill its function and stroke timed during Cold Shutdown.

Justification for Deferral

Item Number:	CN-NV-01
Valve:	1NV0015B 2NV0015B
Flow Diagram:	CN-1554-1.0 CN-2554-1.0
Code Category:	A
ASME Class:	2
Function:	Valves closes to isolate flow to the letdown heat exchanger.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of this valve in the closed position during testing would result in loss of pressurizer level control and could result in plant shutdown.
Test Alternative & Frequency:	Valve will be exercise (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-21
Valve:	1NI0121A, 1NI0152B 2NI0121A, 2NI0152B
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Valves 1(2)NI0121A and 1(2)NI0152B are motor operated gate valves on the discharge side of NI Pump A and B to NC Loops B&C and A&D, respectively. The valves are normally closed during the injection phase and cold leg recirculation phases of ECCS operation to prevent diversion of flow via the NC hot legs.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve full-stroke to position required to fulfill its function and stroke time every three months.
Basis for Deferral:	Exercising the valves in modes 1-3 can result in challenging NI pump discharge relief valves and overpressurization of NI piping due to reactor coolant leakage pressurizing piping downstream.
Alternate Testing & Frequency:	These valves will be exercised (full-stroked) to position to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NI-22
Valve:	1NI0144A, 2NI0144A
Flow Diagram:	CN-1562-1.2 CN-2562-1.2
Code Category:	B
ASME Class:	2
Function:	Valves NI0144A are motor operated valves on the NI Pump B miniflow line. The valves are open during the injection mode when the NI Pumps are operating. During the recirculation mode, when the NI Pumps are taking suction from the containment sump (via the ND System), the valves are closed to isolate the miniflow line. Closure of the valves prevents the possibility of introducing reactor coolant water into the FWST and diversion of flow from the NC System. The valves are also interlocked with valves ND0028A & NI0136B such that they can not be opened unless valves ND0028A and NI0136B are closed.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve full-stroke to position required to fulfill its function and stroke time every three months.
Basis for Deferral:	If NI0144A was closed for testing and of a loss of offsite power with the loss of Train A diesel generator as the single failure occurred, the valve could not be reopened which would result in a loss of both NI pumps.
Test Alternative & Frequency:	These valves will be exercised (full-stroked) to position to fulfill its function during cold shutdown.

Justification for Deferral

Item Number:	CN-NV-02
Valve:	1NV0089A, 1NV0091B 2NV0089A, 2NV0091B
Flow Diagram:	CN-1554-1.0 CN-2554-1.0
Code Category:	B
ASME Class:	2
Function:	These valves isolate the return flow path from the reactor coolant pump seal water supply.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Closure of one of these valves during power operation would increase backpressure on the seals, reducing leak-off flow and lifting relief valve 1(2)NV0087 to divert leak-off to the PRT. Damage to RCP seals could result.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NV-02
Valve:	1NV0089A, 1NV0091B 2NV0089A, 2NV0091B
Flow Diagram:	CN-1554-1.0 CN-2554-1.0
Code Category:	B
ASME Class:	2
Function:	These valves isolate the return flow path from the reactor coolant pump seal water supply.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Closure of one of these valves during power operation would increase backpressure on the seals, reducing leak-off flow and lifting relief valve 1(2)NV0087 to divert leak-off to the PRT. Damage to RCP seals could result.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NV-03
Valve:	1NV0188A, 1NV0189B 2NV0188A, 2NV0189B
Flow Diagram:	CN-1554-1.1 CN-2554-1.1
Code Category:	B
ASME Class:	2
Function:	Valves close to isolate the volume control tank (normal charging supply) upon receipt of a safety injection signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Closure of one of these valves during normal unit operation would isolate the normal suction for the charging pumps. Alternate suction paths would result in increasing the reactor coolant system boron inventory and could result in plant shutdown. In addition, seal water for the reactor coolant pumps would inhibited. This may result in damage to the reactor coolant pump seals.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NV-04
Valve:	1NV0312A, 1NV0314B 2NV0312A, 2NV0314B
Flow Diagram:	CN-1554-1.2 CN-2554-1.2
Code Category:	B
ASME Class:	2
Function:	Valves close to isolate the charging line to the Reactor Coolant System upon receipt of a safety injection signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Closure of one of these valves during power operation would isolate charging flow to the Reactor Coolant System. This could result in loss of pressurizer level control and cause plant shutdown.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NV-10
Valve:	1NV0252A, 1NV0253B 2NV0252A, 2NV0253B
Flow Diagram:	CN-1554-1.7 CN-2554-1.7
Code Category:	B
ASME Class:	2
Function:	Aligns refueling water storage tank (FWST) to the suction of the centrifugal charging pumps upon receipt of a safety injection signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	If one of these valves were to fail in the open position during testing, the FWST would be aligned to the suction of the charging pumps. This would result in an increase in RCS Boron inventory and could result in a plant shutdown.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-NV-11
Valve:	1NV0010A, 1NV0011A, 1NV0013A 2NV0010A, 2NV0011A, 2NV0013A
Flow Diagram:	CN-1554-1.0 CN-2554-1.0
Code Category:	B
ASME Class:	2
Function:	These valves must automatically close to isolate containment upon receipt of a Pressurizer Low Level signal, if either valve 1(2)NV0001A or 1(2)NV0002A closes, upon receipt of a Phase A Containment Isolation Signal (ST), or on a concurrent failure of both centrifugal charging pumps. These valves are cross-interlocked with valves 1(2)NV0001A and 1(2)NV0002A such that they will automatically close if either 1(2)NV0001A or 1(2)NV0002A is not in the "Open" position. These valves can be operated from the Auxiliary Shutdown Panel, and cannot be opened unless valves 1(2)NV0001A and 1(2)NV0002A are both open.
Test Requirement:	Measure Full Stroke Time/Failed to Safe Position – Quarterly Stroke time and observe fail-safe operation every three (3) months.
Basis for Deferral:	Letdown header relief valve 1(2)NV0014 has experienced lifting and subsequent seat leakage as a result of pressure transients during orifice swaps for stroke time testing of valves 1(2)NV0010A, 1(2)NV0011A, and 1(2)NV0013A. Leakage past 1(2)NV0014 is considered Reactor Coolant (NC) system leakage. This leakage directly impacts Technical Specification. Based on the above, testing of these valves is impractical and non-conservative during power operation.
Test Alternative & Frequency:	Valves 1(2)NV0010A, 1(2)NV0011A, and 1(2)NV0013 will be stroke time tested and fail-safe operation verified during cold shutdown.

Justification for Deferral

Item Number:	CN-RF-02
Valve:	1RF0389B, 1RF0447B 2RF0389B, 2RF0447B
Flow Diagram:	CN-1599-2.2 CN-2599-2.2
Category:	A
ASME Class:	2
Function:	Opens to allow Fire Protection (RF) System supply to the containment fire suppression headers. Closes to provide containment isolation.
Test Requirement:	Measure Full Stroke Time - Quarterly Exercise valve full stroke to the position required to fulfill its function and stroke time every 3 months per OMa-1988 Part 10, 4.3.2.1. Also, leak test to Appendix J requirements at refueling.
Basis for Deferral:	Opening these valves during power operations could introduce water into normally dry headers. Containment entry at power is required to drain the headers.
Test Alternative & Frequency	Valves will be stroke timed closed at a cold shutdown frequency.

Justification for Deferral

Item Number:	CN-RN-02
Valve:	1RN0437B 2RN0437B
Flow Diagram:	CN-1574-2.8 CN-2574-2.2
Code Category:	B
ASME Class:	2
Function:	This valve closes on a high-high containment pressure signal to isolate the supply header to lower containment.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke every 3 months.
Basis for Deferral:	Failure of this valve in the closed position during testing would result in loss of containment chilled water flow to the reactor coolant pump motor coolers. This would result in unit shutdown and possible damage to the reactor coolant pumps.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown.

Justification for Deferral

Item Number:	CN-SM-01
Valve:	1SM0001, 1SM0003, 1SM0005, 1SM0007 2SM0001, 2SM0003, 2SM0005, 2SM0007
Flow Diagram:	CN-1593-1.0 CN-2593-1.0
Code Category:	B
ASME Class:	2
Function:	Main steam isolation valves.
Test Requirement:	Measure Full Stroke Time/Failed to Safe Position – Quarterly Exercise valve (full stroke) to the position required to fulfill its function, stroke time, and verify fail safe actuation every 3 months.
Basis for Deferral:	Closure of these valves during power operation would introduce a severe transient in the main steam lines which could cause a unit trip.
Test Alternative & Frequency:	Valves will be exercised (full stroke) to the position required to fulfill its function, stroke timed, and fail safe actuation verified during startup after cold shutdown.

Justification for Deferral

Item Number:	CN-VI-02
Valve:	1VI0077B 2VI0077B
Flow Diagram:	CN-1605-1.4 CN-2605-1.5
Code Category:	A
ASME Class:	2
Function:	Provides containment isolation. Closes upon receipt of a containment high-high pressure signal.
Test Requirement:	Measure Full Stroke Time – Quarterly Exercise valve (full stroke) to the position required to fulfill its function and stroke time every 3 months.
Basis for Deferral:	Failure of this valve in the closed position during testing would result in loss of instrument air supply to valves and controls within containment. This would result in loss of normal reactor coolant letdown, containment ventilation unit controls, normal air supply to the power operated relief valves, etc., thereby possibly causing unit shutdown.
Test Alternative & Frequency:	Valve will be exercised (full stroke) to the position required to fulfill its function and stroke timed during cold shutdown. Leak rate performance testing will be performed at refueling.

DUKE POWER

CATAWBA NUCLEAR STATION

SUPPLEMENTAL TEST PROGRAM

Section 7.0

CATAWBA NUCLEAR STAT

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1CACK0360		SA	Category C		No	3			1CACK0360 - Full Stroke (Closed)	Tested every refueling outage
1CACK0361		SA	Category C		No	3			1CACK0361 - Full Stroke (Closed)	Tested every refueling outage
1CACK0400		SA	Category C		No	3			1CACK0400 - Full Stroke (Closed)	Tested every refueling outage
1CACK0401		SA	Category C		No	3			1CACK0401 - Full Stroke (Closed)	Tested every refueling outage
1CACK0440		SA	Category C		No	3			1CACK0440 - Full Stroke (Closed)	Tested every refueling outage
1CACK0441		SA	Category C		No	3			1CACK0441 - Full Stroke (Closed)	Tested every refueling outage
1CACK0481		SA	Category C		No	3			1CACK0481 - Full Stroke (Closed)	Tested every refueling outage
1CACK0480		SA	Category C		No	3			1CACK0480 - Full Stroke (Closed)	Tested every refueling outage
1CACK0520		SA	Category C		No	3			1CACK0520 - Full Stroke (Closed)	Tested every refueling outage
1CACK0521		SA	Category C		No	3			1CACK0521 - Full Stroke (Closed)	Tested every refueling outage
1CACK0560		SA	Category C		No	3			1CACK0560 - Full Stroke (Closed)	Tested every refueling outage
1CACK0561		SA	Category C		No	3			1CACK0561 - Full Stroke (Closed)	Tested every refueling outage
1CACK0600		SA	Category C		No	3			1CACK0600 - Full Stroke (Closed)	Tested every refueling outage
1CACK0601		SA	Category C		No	3			1CACK0601 - Full Stroke (Closed)	Tested every refueling outage
1CACK0640		SA	Category C		No	3			1CACK0640 - Full Stroke (Closed)	Tested every refueling outage
1CACK0641		SA	Category C		No	3			1CACK0641 - Full Stroke (Closed)	Tested every refueling outage
2CACK0360		SA	Category C		No	3			2CACK0360 - Full Stroke (Closed)	Tested every refueling outage
2CACK0361		SA	Category C		No	3			2CACK0361 - Full Stroke (Closed)	Tested every refueling outage
2CACK0400		SA	Category C		No	3			2CACK0400 - Full Stroke (Closed)	Tested every refueling outage
2CACK0401		SA	Category C		No	3			2CACK0401 - Full Stroke (Closed)	Tested every refueling outage
2CACK0440		SA	Category C		No	3			2CACK0440 - Full Stroke (Closed)	Tested every refueling outage
2CACK0441		SA	Category C		No	3			2CACK0441 - Full Stroke (Closed)	Tested every refueling outage
2CACK0480		SA	Category C		No	3			2CACK0480 - Full Stroke (Closed)	Tested every refueling outage
2CACK0481		SA	Category C		No	3			2CACK0481 - Full Stroke (Closed)	Tested every refueling outage

CATAWBA NUCLEAR STAT

CA - AUXILIARY FEEDWATER SYSTEM

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2CACK0520		SA	Category C		No	3			2CACK0520 - Full Stroke (Closed)	Tested every refueling outage
2CACK0521		SA	Category C		No	3			2CACK0521 - Full Stroke (Closed)	Tested every refueling outage
2CACK0560		SA	Category C		No	3			2CACK0560 - Full Stroke (Closed)	Tested every refueling outage
2CACK0561		SA	Category C		No	3			2CACK0561 - Full Stroke (Closed)	Tested every refueling outage
2CACK0600		SA	Category C		No	3			2CACK0600 - Full Stroke (Closed)	Tested every refueling outage
2CACK0601		SA	Category C		No	3			2CACK0601 - Full Stroke (Closed)	Tested every refueling outage
2CACK0640		SA	Category C		No	3			2CACK0640 - Full Stroke (Closed)	Tested every refueling outage
2CACK0641		SA	Category C		No	3			2CACK0641 - Full Stroke (Closed)	Tested every refueling outage

CATAWBA NUCLEAR STAT

FD - D/ G ENGINE FUEL OIL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1FD29	CN -1609-03.00	SA	Category C		Yes	3			1FD29 - Full Stroke (Open)	Tested once monthly
1FD34	CN -1609-03.00	SA	Category C		Yes	3			1FD34 - Relief Valve / Pressure Regulating	Tested once monthly
1FD69	CN -1609-03.01	SA	Category C		Yes	3			1FD69 - Full Stroke (Open)	Tested once monthly
1FD74	CN -1609-03.01	SA	Category C		Yes	3			1FD74 - Relief Valve / Pressure Regulating	Tested once monthly
2FD29	CN -2609-03.00	SA	Category C		Yes	3			2FD29 - Full Stroke (Open)	Tested once monthly
2FD34	CN -2609-03.00	SA	Category C		Yes	3			2FD34 - Relief Valve / Pressure Regulating	Tested once monthly
2FD69	CN -2609-03.01	SA	Category C		Yes	3			2FD69 - Full Stroke (Open)	Tested once monthly
2FD74	CN -2609-03.01	SA	Category C		Yes	3			2FD74 - Relief Valve / Pressure Regulating	Tested once monthly

CATAWBA NUCLEAR STAT

KD - D/G ENGINE COOLING WATER

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1KD6	CN -1609-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested once monthly
1KD21	CN -1609-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested once monthly
2KD6	CN -2609-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested once monthly
2KD21	CN -2609-01.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested once monthly

CATAWBA NUCLEAR STAT

LD - D/G ENGINE LUBE OIL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1LD2	CN -1609-02.00	SA	Category C		Yes	3			1LD2 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1LD32	CN -1609-02.02	SA	Category C		Yes	3			1LD32 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
1LD71	CN -1609-02.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
1LD72	CN -1609-02.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
1LD78	CN -1609-02.02	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
1LD79	CN -1609-02.02	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
2LD2	CN -2609-02.00	SA	Category C		Yes	3			2LD2 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2LD32	CN -2609-02.02	SA	Category C		Yes	3			2LD32 - Relief Valve Test (Closed to Open)	Test relief valve per OM-1 schedule
2LD71	CN -2609-02.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
2LD72	CN -2609-02.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
2LD78	CN -2609-02.02	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
2LD79	CN -2609-02.02	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1NV1A	CN -1554-01.00	AO	Category B		Yes	1			1NV1A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
1NV2A	CN -1554-01.00	AO	Category B		Yes	1			1NV2A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
1NV44A	CN -1554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years
1NV55A	CN -1554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years
1NV66A	CN -1554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years
1NV77A	CN -1554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV1A	CN -2554-01.00	AO	Category B		Yes	1			2NV1A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
2NV2A	CN -2554-01.00	AO	Category B		Yes	1			2NV2A - Failed to Safe Pos and Timed (Opn to Cls)	Tested at cold shutdown
									Position Indicator (Closed)	Tested once every two years
2NV44A	CN -2554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV55A	CN -2554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years
2NV66A	CN -2554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

NV - CHEMICAL AND VOLUME CONTROL

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2NV77A	CN -2554-01.05	ML	Category B		No	3			Stroke Time (Open to Closed)	Tested every other refueling outage
									Position Indicator (Closed)	Tested once every two years

CATAWBA NUCLEAR STAT

VG - D/G ENGINE STARTING AIR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VG15	CN -1609-04.00	SA	Category C		Yes	3			1VG15 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown
1VG16	CN -1609-04.00	SA	Category C		Yes	3			1VG16 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown
1VG25	CN -1609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG26	CN -1609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG27	CN -1609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG28	CN -1609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG29	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
1VG30	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG31	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG32	CN -1609-04.00	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG59	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown
1VG60	CN -1609-04.01	SA	Category C		Yes	3			1VG60 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown
1VG69	CN -1609-04.01	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG70	CN -1609-04.01	SO	Category B		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
1VG71	CN -1609-04.01	SO	Category B		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
1VG72	CN -1609-04.01	SO	Category B		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly

CATAWBA NUCLEAR STAT

VG - D/G ENGINE STARTING AIR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
1VG73	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
1VG74	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
1VG75	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
1VG76	CN -1609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG15	CN -2609-04.00	SA	Category C		Yes	3			2VG15 - Full Stroke (Open)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG16	CN -2609-04.00	SA	Category C		Yes	3			2VG16 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown
2VG25	CN -2609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG26	CN -2609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG27	CN -2609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG28	CN -2609-04.00	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG29	CN -2609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG30	CN -2609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG31	CN -2609-04.00	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG32	CN -2609-04.00	SA	Category C		Yes	3			2VG32 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG59	CN -2609-04.01	SA	Category C		Yes	3			2VG59 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown
2VG60	CN -2609-04.01	SA	Category C		Yes	3			2VG60 - Full Stroke (Open)	Tested once monthly
									Full Stroke (Open)	Tested at cold shutdown

CATAWBA NUCLEAR STAT

VG - D/G ENGINE STARTING AIR

Equipment ID	Flow Diagram	Actuator Design	Valve Catg.	Valve Type	IST Actv.	ASME Class	Relief Request	JOD	Test Plan	Frequency
2VG69	CN -2609-04.01	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG70	CN -2609-04.01	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG71	CN -2609-04.01	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG72	CN -2609-04.01	SO	Category B		Yes	3			Full Stroke (Open)	Tested once monthly
									Full Stroke (Both)	Tested at cold shutdown
2VG73	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG74	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG75	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly
2VG76	CN -2609-04.01	SA	Category C		Yes	3			Full Stroke (Both)	Tested at cold shutdown
									Full Stroke (Open)	Tested once monthly

CATAWBA NUCLEAR STAT

WL - LIQUID WASTE RECYCLE SYSTEM

Equipment ID	Flow Diagram	Pump Design	ASME Class	Relief Request	Test Plan	Frequency
1WLPUATS	CN -1565-02.02	VLS >= 600	3		Simple Flow (pass/fail)	Tested once quarterly
1WLPUBTS	CN -1565-02.02	VLS >= 600	3		Simple Flow (pass/fail)	Tested once quarterly
2WLPUATS	CN -2565-02.02	VLS >= 600	3		Simple Flow (pass/fail)	Tested once quarterly
2WLPUBTS	CN -2565-02.02	VLS >= 600	3		Simple Flow (pass/fail)	Tested once quarterly