LICENSING DOCUMENT CHANGE REQUEST

LDCR Number	Rev.
1 - 9 9 - I S T - 0 0 6	0 0

PART 1 – INITIATION *(ORIGINATOR)*

A. Affected Doc	OPL	UFS	Plans &	Programs
■ Unit 1 ☐ Unit 2 ☐ Site	☐ Facility Operating License ☐ Technical Specifications ☐ Technical Specification Bases ☐ Environmental Prot. Plan	☐ UFSAR	☐ Site Emergency Plan (SEP) ☐ Secunty Plans (SPS) ☐ Process Control Program (PCP) ☐ Offsite Dose Calc. Manual (ODM)	☐ ISI Program Plan (ISI) ■ IST Program Plan (IST) ☐ Core Operating Limits Report (COL) ☐ QA Topical Report (QAT)

B. Description ■ Permanent ☐ Temporary; Expected Duration: _

Revised cover sheet effective date from 12/25/99 to 12/26/99 to provide consistency between the cover sheet and the internal text of the Program document.

C. Page	Section, Figure, Table	Page	Section, Figure, Table
Cover Sheet Signature Page	Cover Sheet Signature Page		

D. Source of Change; References

Internal Program Text

E. NIP-SEV-01 Review	F. Originator *(Print)*	Date
☒ Applicability Review No.: 38066 ☐ Safety Evaluation No.:	Jeffrey A. Neyhard JAN	6/2199

● FORWARD TO LICENSE DOCUMENT OWNER FOR FURTHER PROCESSING ●

PART 2 – REVIEW AND APPROVAL *(LDO)*

A. Independent Review *(Print / Initial / Date)* ☐ Obtained per NIP-IRG-01	B. Effectiveness Review	C. SORC
L.V. Lukens LK 6/21/99	■ N/R ☐ Attached	■ N/R Mtg. No.: Mtg. Date:

D. SRAB ■ N/R	E. Plant Mgr.
Mtg. No.: Mtg. Date:	☐ N/R *(UFSAR Only)* ☐ Obtained per NIP-IRG-01 ☑ Obtained per Doc Coversheet ☐ Obtained per NIP-SEV-01

F. NRC *(NIP-IRG-01 Submittal Required)* ■ N/R	G. LDO Branch Manager / Designee *(Print / Initial)*	Date
☐ Letter No. / Date: ☐ NRC Appl. Date:	BJ Jaeger BJJ	6-21-99

PART 3 – IMPLEMENTATION *(LDO)*

A. OPL Only: Affected Documents Updated	☐
B. UFS Only: Need "As-Built" or Affected Document	☐
C. Other: ________	☐

PART 4 – CLOSURE *(LDO)*

A. ☐ Incorporated into License Document. Revision / Amendment: ______	OR	B. ☐ Not Incorporated into License Document
C. Closed by *(Print / Initial)*		Date

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ENGINEERING PROGRAMS
LICENSING DOCUMENT CHANGE REQUEST DOCUMENTED REVIEWS

LDCR No.: 1-99-IST-006 Rev. 00	Page 2 of 3

AFFECTED DOCUMENT: Unit One Second Ten-Year Interval Inservice Testing Program Plan

PROGRAM PLAN DOC. NO. NMP1- IST-003 REV. 03

REVIEWS	SIGNATURE	DATE
PROGRAM PLAN MANAGER JEFFREY A. NEYHARD	Jeffrey A. Neyhard	JUNE 21, 1999
INDEPENDENT REVIEW LARRY D. LUKENS	L D Lukens	6/21/99
SUPERVISOR ASME XI PROGRAMS GLEN R. PERKINS	Jeffrey A. Neyhard for GLEN PERKINS PER TELECON 6-18-99	6-18-99
SUPERVISOR MECHANICAL DESIGN	NOT REQUIRED - REVIEW WAIVED PER NIP-IIT-01, STEP 3.1.3	
MANAGER TECHNICAL SUPPORT	NOT REQUIRED - REVIEW WAIVED PER NIP-IIT-01, STEP 3.1.3	
MANAGER UNIT 1 OPERATIONS	NOT REQUIRED - REVIEW WAIVED PER NIP-IIT-01, STEP 3.1.3	

APPROVALS		
MANAGER NUCLEAR ENGINEERING SERVICES W. YAEGER	B Yaeger	6-21-99
PLANT MANAGER, UNIT 1 R. SMITH		

DESCRIPTION OF LDCR: REVISED COVER SHEET EFFECTIVE DATE FROM 12/25/99 TO 12/26/99 TO PROVIDE CONSISTENCY BETWEEN THE COVER SHEET AND THE INTERNAL TEXT OF THE PROGRAM DOCUMENT.

DIRECTIONS FOR IMPLEMENTATION:

Remove old cover sheet with 12/25/1999 date and replace with new cover sheet containing revised date of 12/26/1999

No implementing procedures are affected by this LDCR.

ENGINEERING PROGRAMS
LICENSING DOCUMENT CHANGE REQUEST
DOCUMENTED REVIEWS

LDCR No.: 1-99-IST-006 Rev. 00 | Page 2 of 3

AFFECTED DOCUMENT: Unit One Second Ten-Year Interval Inservice Testing Program Plan

PROGRAM PLAN DOC. NO. NMP1-IST-003 REV. 03

REVIEWS	SIGNATURE	DATE
PROGRAM PLAN MANAGER JEFFREY A. NEYHARD	Jeffrey A. Neyhard	JUNE 21, 1999
INDEPENDENT REVIEW LARRY D. LUKENS	L D Lukens	6/21/99
SUPERVISOR ASME XI PROGRAMS GLEN R. PERKINS	Jeffrey A. Neyhard for GLEN PERKINS PER TELECON 6-18-99	6-18-99
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MANAGER UNIT 1 OPERATIONS	NOT REQUIRED - REVIEW WAIVED PER NIP-IIT-01, STEP 3.1.3	

APPROVALS		
MANAGER NUCLEAR ENGINEERING SERVICES W. YAEGER	B Yaeger	6-21-99
PLANT MANAGER, UNIT 1 R. SMITH	R Smith	6/23/99

DESCRIPTION OF LDCR: REVISED COVER SHEET EFFECTIVE DATE FROM 12/25/99 TO 12/26/99 TO PROVIDE CONSISTENCY BETWEEN THE COVER SHEET AND THE INTERNAL TEXT OF THE PROGRAM DOCUMENT.

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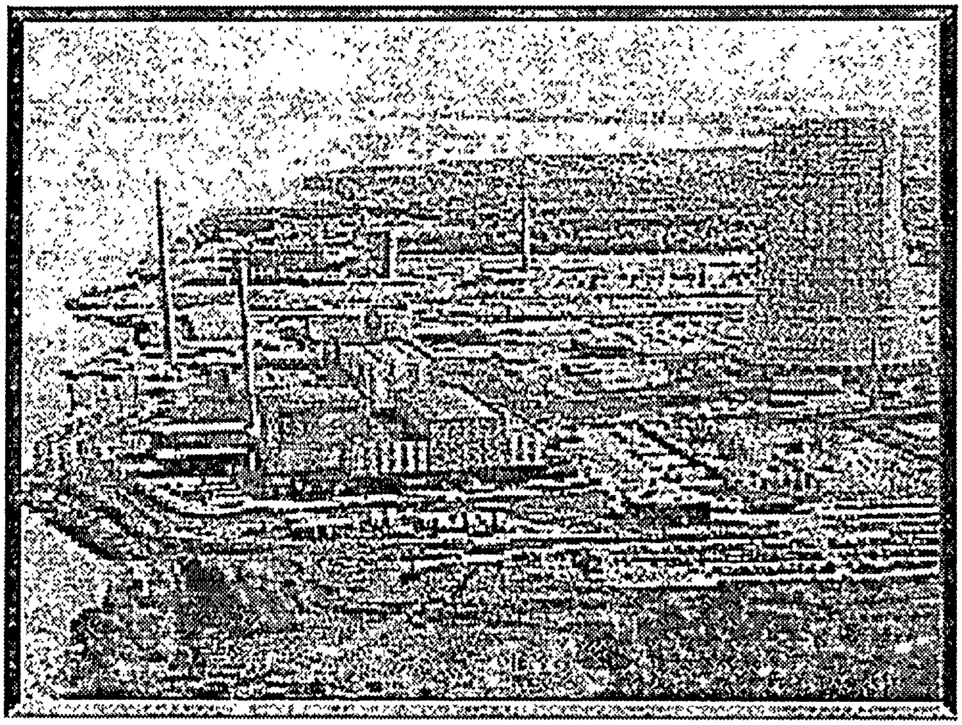
Remove old cover sheet with 12/25/1999 date and replace with new cover sheet containing revised date of 12/26/1999

No implementing procedures are affected by this LDCR.

THIRD TEN YEAR INSERVICE TESTING PROGRAM PLAN



NINE MILE POINT NUCLEAR STATION - UNIT 1

Niagara Mohawk

NMP1-IST-003

NIAGARA MOHAWK POWER CORPORATION

NINE MILE POINT NUCLEAR STATION UNIT 1

PUMP AND VALVE INSERVICE TESTING PROGRAM PLAN

3RD TEN-YEAR INTERVAL

Revision 3

Prepared:	Jeffrey A. Mayhood / JEFFREY A. MAYHOOD IST Program Manager	Date	5-12-99
Reviewed:	[signature] Independent Reviewer	Date	26 May 1999
Reviewed:	Glenn R Perkins Supervisor, ASME XI Programs	Date	24 May 1999
Reviewed:	Thomas D Morgan Supervisor, Mechanical Design U1	Date	5/25/99
Reviewed:	[signature] Manager, Technical Support	Date	5/30/99
Reviewed:	[signature] Manager, Operations	Date	5/28/99
Approved:	[signature] Manager, Nuclear Engineering Services	Date	6-1-99
Approved:	R H Smith Plant Manager, Unit 1	Date	6/1/99

Effective Date: ~~12/25/1999~~ 12-26-1999 [initials] 6-21-99

LIST OF EFFECTIVE SECTIONS

Section	LDCR No.	Date
Program Plan Text – Sections I, II, & III	Original	5/12/99
Attachment 1 – Automatic Depressurization System	Original	5/12/99
Attachment 2 – Breathing Air to Drywell	Original	5/12/99
Attachment 3 - Control Room Chill Water and HVAC	Original	5/12/99
Attachment 4 – Control Rod Drive	Original	5/12/99
Attachment 5 – Core Spray	Original	5/12/99
Attachment 6 – Condensate Transfer	Original	5/12/99
Attachment 7 – Combustible Gas Control	Original	5/12/99
Attachment 8 – H_2-O_2 Monitoring	Original	5/12/99
Attachment 9 – Containment Spray	Original	5/12/99
Attachment 10 – Clean Up	Original	5/12/99
Attachment 11 – Emergency Diesel Generator Auxiliaries	Original	5/12/99
Attachment 12 – Emergency Cooling	Original	5/12/99
Attachment 13 – Spent Fuel Pool Cooling	Original	5/12/99
Attachment 14 – Feedwater	Original	5/12/99
Attachment 15 – Instrument Air	Original	5/12/99
Attachment 16 – Liquid Poison	Original	5/12/99
Attachment 17 – Main Steam System	Original	5/12/99
Attachment 18 – Traversing Incore Probe	Original	5/12/99
Attachment 19 –Primary Containment Vacuum Relief	Original	5/12/99
Attachment 20 – Reactor Building HVAC	Original	5/12/99
Attachment 21 – Reactor Building Closed Loop Cooling	Original	5/12/99
Attachment 22 – Reactor Recirculation	Original	5/12/99
Attachment 23 – Waste Disposal	Original	5/12/99
Attachment 24 – Reactor Vessel Instrumentation	Original	5/12/99
Attachment 25 – Shutdown Cooling	Original	5/12/99
Attachment 26 – Post-Accident Sampling	Original	5/12/99
Attachment 27 – Emergency Service Water	Original	5/12/99

REVISION SUMMARY

	Description Of Change		Reason For Change
0.	Original Issue of Third Interval Program. Incorporated following LDCRs: 1-96-IST-002, 1-96-IST-004, 1-97-IST-001, 1-97-IST-003, 1-97-IST-004, 1-97-IST-005, 1-97-IST-006, 1-97-IST-008, 1-97-IST-010		Incorporate new Code requirements per 10CFR50.55. Requirements based on 1989 Edition of ASME Section XI and OM-1987 w/OMa-1988 Addenda.
1.	Add Plant Manager's Approval; Revise List of Effective Sections; Revise Section 1.2.2 to clarify interval extension; revise List of References; various editorial comments; revise Attachments 2 and 27 to move SW to Drywell CIVs to ESW Listing; Revise Attachment 25 to add penetration numbers and add LJ and Note 4 to valves CKV-38-169 through 38-172; Added Sections 1.3.4, Cold Shutdown Testing, & 1.3.5, Refueling Outage Testing; Changed reference from Reg. Guide 1.26 to Safety Guide 26 to reflect document used to classify systems.		Incorporate Licensing comments; Correct omissions; editorial changes to provide clarification. Changes are indicated by revision bars.
2.	Add Proposed Alternative GEN-VR-2		Provide alternate requirements to OM-1 Relief Valve Testing requirements concerning test bench accumulator volume. Similar relief was granted to Unit 2. Prevents having to purchase new relief valve testing bench.
3.	Revise Valve Category for Valves IV-05-01R, -02R, -03R, 04R, -11, -12, IV-39-11R, -12R, -13R, -14R to Category A (Attachment 12). In Attachment 15, Deleted Valves CKV-94-184 and -194. Enhanced Section III, 3.1, 2nd Paragraph text regarding "cold" and "safe" shutdown. Changed CRS-ROJ-4 to relief request CRS-VR-1 and CTN-SP-ROJ-2 to relief request CTN-SP-VR-1. Corrected misc. typo errors. Deleted DG-ROJ-1		Implement LDCR 1-99-IST-004, DER 1-1999-1140. Valves CKV-94-184 and –194 were deleted from the Plant. "Cold" shutdown remains identified in Part 10 of the OM Code therefore NUREG-1482 requirements were added to show that relief is not required for plants licensed as "safe" shutdown. ROJ's CRS-ROJ-4 and CTN-SP-ROJ-2 propose a sampling program IAW GL98-04 Position 2 therefore relief request format is required. Final reviews identified several typo errors. DG-ROJ-1 is no longer required. Piping was cleaned and design flow can be obtained on a quarterly basis.
4.			
5.			

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1. INSERVICE TESTING PROGRAM PLAN

1.1 OVERVIEW

The Pump and Valve Inservice Testing Program Plan for the 3rd Ten-Year Interval is organized into three sections that are individually identified and paginated. Section III contains additional subsections, also individually identified and paginated.

Each page of the Program Plan contains: [1] the document number and current revision, [2] the page number for that section/subsection, [3] the applicable section/subsection designator, [4] the effective section/subsection change number, and [5] the effective section/subsection change development date.

Example:

NMP1-IST-003, Rev. 00 [1]	1 of 11 [2]	Section I [3]
Original [4]		July 31, 1998 [5]

The sections, including a general description of each, are:

SECTION I - GENERAL IST PROGRAM PLAN

This section presents the general program commitment basis, the conceptual framework used in developing the Program Plan, definitions applicable to the Program Plan, and the references used by all sections.

SECTION II - PUMP IST PROGRAM PLAN

This section deals specifically with the Pump Test Program, containing a discussion of certain items, pump table nomenclature, pump table format, a pump drawing list, the pump table showing certain pump and measured parameter information, notes, relief requests from requirements found to be not practicable, and Cold Shutdown and Refueling Outage justifications.

SECTION III - VALVE IST PROGRAM PLAN

This section deals specifically with the Valve Test Program, containing a discussion of certain items, valve table nomenclature, a valve drawing list, valve table format, valve test tables arranged by system that include specific notes, relief requests from requirements found to be not practicable, and Cold Shutdown and Refueling Outage justifications.

1.2 GENERAL INFORMATION

1.2.1 Introduction

This document presents the Pump and Valve Inservice Testing Program Plan for the 3rd Ten-Year Interval (**Program Plan**) at the Nine Mile Point Nuclear Station Unit 1 (**NMP1**), in compliance with the requirements of 10CFR50.55a(f) in the Code of Federal Regulations, Inservice Testing Requirements, and NMP1 Technical Specification 3.2.6, Inservice Inspection and Testing. The Program Plan was prepared in accordance with the rules of the ASME Boiler and Pressure Vessel Code, Section XI, Division 1, 1989 Edition (**ASME Code**).

1.2.2 Operating License Date, Intervals, and Conditions

Niagara Mohawk Power Corporation was issued the Construction Permit for Nine Mile Point Unit 1 (NMP1) on April 12, 1965. The first Ten-Year Inservice Inspection (ISI) interval began on December 26, 1974 and was scheduled to end on December 25, 1984. The interval was extended due to a maintenance outage, and actually ended on June 26, 1986. The first ten-year IST interval, which began in December 1979, was scheduled to conclude in December 1989. NMPC voluntarily changed the IST interval schedule to make the IST interval coincide with the ISI interval. The second IST ten-year interval began on June 27, 1986 and was scheduled to end on June 26, 1996. The second ten-year interval was extended until December 25, 1998, due to a 30-month maintenance outage. In accordance with IWA-2430, paragraph (d), the second ten-year interval has been extended an additional period, not to exceed 12 months, to conclude on December 25, 1999. Therefore, the third ten-year interval will begin on December 26, 1999.

NMP1 is licensed with a safe shutdown condition of hot shutdown or hot standby.

1.2.3 Applicable Codes

The Program Plan conforms to the requirements of the 1989 Edition of the ASME Code by the implementation of the 1987 ASME/ANSI Operations and Maintenance (OM) Standards, 1988 OMa Addenda, Part 6, "Inservice Testing of Pumps in Light-Water Reactor Power Plants," and Part 10, "Inservice Testing of Valves in Light-Water Reactor Power Plants," in their entirety.

The ASME Code specifies that pumps shall be tested in accordance with Part 6 (OM-6), and valves shall be tested in accordance with Part 10 (OM-10). Part 10 (OM-10) further directs that safety and relief valves shall meet the inservice test requirements of Part 1 (OM-1), "Requirements for Inservice Performance Testing of Nuclear Power Plant Pressure Relief Devices." References in the Program Plan to OM-1, OM-6, and OM-10 correspond to the 1987 ASME/ANSI OM Standard Parts 1, 6, and 10 (OM) respectively, unless otherwise noted. Additionally, for OM-6 and OM-10, the 1988 OMa Addenda applies. 10CFR50.55a imposes requirements in addition to those in OM-10 related to leakage rate testing of Containment Isolation Valves.

Nine Mile Point Unit 1 facility components were generally designed and built to the ANSI B31.1-1955 with portions of some systems to ASME I-1962 and/or ASME III-1965. In

accordance with ASME Section XI, IWA-1320(e), some systems are ASME classified as an optional upgrade. The upgrade directs that the repair, replacement, and maintenance activities will be performed to ASME rules. It does not require NMPC to conduct periodic inservice, functional, or hydrostatic testing. For optionally upgraded systems, IWA-1320 states that the application of the rules (ASME Code) is at the option of the owner and not a requirement.

In the Program Plan, components designated as ASME Class 1, 2 or 3 are subject to the OM testing requirements, frequencies, and conditions except as noted in the test tables.

1.2.4 Program Plan Changes

The Program Plan is a living document that is updated (1) due to changes in the plant configuration, licensing basis, design basis, or design requirements to ensure compliance with the ASME Code, 10CFR50.55a, and approved relief requests and (2) for consistency with Generic Letter (GL) 89-04, NUREG-1482, and other applicable documents. Changes in the Program Plan's scope, test methods, or acceptance criteria will be administered in accordance with applicable NMPC documents subject to the requirements of the 10CFR50.59 process.

Changes to the Program Plan resulting from the installation of new components due to system modifications will be incorporated within three (3) months from the Operations Acceptance date.

Changes to the Program Plan resulting from the reclassification of components due to updated license basis, design basis, or design requirements will be incorporated within six (6) months from the update of the applicable document (e.g., Technical Specification, UFSAR, Appendix B Determination, etc.).

When necessary, supplemental relief requests will be submitted for requirements found to be impractical. Upon NRC approval, the granted relief or the authorized alternative will be incorporated into the Program Plan.

Revisions to the Program Plan will be conducted periodically to incorporate approved changes. The revised Program Plan will be submitted to the NRC for information.

1.2.5 Relief Requests

10CFR50.55a(f) requires testing of components unless the Code requirement is determined to be impractical. The Program Plan specifies testing of pumps and valves unless it has been determined that such testing would:

1. Render multiple Safety Related system trains inoperable;
2. Cause a reactor scram or turbine trip;
3. Cause significant equipment damage;
4. Require entry into inaccessible station areas;
5. Increase the possibility of an inter-system LOCA.

Where it has been determined that testing is not practical, a relief request has been prepared. Each relief request provides justification for not performing the Code-required testing and provides proposed alternative testing. Relief requests, previously granted for the Pump and Valve Inservice Testing Program Plan 2nd Ten-Year Interval, have been evaluated. If required, the relief requests have been updated and included in the appropriate section (Pump or Valve) of the Program Plan.

Periodically, the granted Relief Requests contained in the Program Plan will be reviewed for continued applicability as well as potential withdrawal.

1.2.6 Exclusions:

The Program Plan excludes Safety-Related components that are:

1. Used only for operating convenience (e.g., test, vent, drain, and instrument valves, etc.), or
2. Used only for system control (e.g., pressure regulating valves, etc.), or
3. Used only for system or component maintenance unless they perform a specific function in shutting down the reactor to the safe shutdown condition, maintaining a reactor in safe shutdown condition, or mitigating the consequences of an accident.

The excluded components and justifications are contained in the appropriate sections of the IST bases document.

1.2.7 Administration

NMP1 has developed implementing procedures to control the establishment and documentation of acceptance criteria. This information is maintained in separate documents.

1.3 PROGRAM PLAN INFORMATION

1.3.1 Program Plan Development

The Program Plan specifies testing requirements for ASME Code Class 1, 2, and 3 Safety-Related and Augmented pumps and valves. The component classification is delineated on the NMP1 Piping and Instrumentation Diagrams (P&IDs) Q List. The NMP1 documents used in conjunction with the NMP1 Piping and Instrumentation Diagrams (P&IDs) Q List during the development of the Program Plan included:

A. ASME Section XI Boundary Diagrams,
B. Safety Class Determinations, and
C. Master Equipment List NMP1 (MEL1) database

The accidents considered in evaluating pump and valve functions are those analyzed in the Updated Final Safety Analysis Report (UFSAR). Some examples of safety functions include: providing injection flow into the reactor vessel, providing cooling water flow to Safety Related heat loads, providing containment isolation functions, ensuring the integrity of the reactor coolant pressure boundary, establishing the proper alignment for the required system flow paths, etc.

The NMP1 IST bases document is a compilation of data from various other documents that details the component safety function(s) and bases to provide a composite reference document. Additionally, the bases document includes those ASME Code Safety Related components that were excluded from the Program Plan and the basis for their exclusion. The NMP1 IST bases document is separate from, but supports, the Program Plan.

The NMP1 interpretations of a number of general items encountered in preparing the Program Plan are provided as follows.

1.3.2 Augmented Components

Certain non-ASME Code safety-related components, are voluntarily included in the IST program plan based on their relative importance to nuclear safety. Where possible, the testing requirements of the OM are followed. If the OM testing requirements cannot be met for the augmented components, test table notes are used to denote such conditions. Specific notes are included for the augmented components to show how these components are being tested. Changes made to the testing requirements and notes for the augmented components are at the discretion of NMPC.

Included as augmented are those components in systems which were not included in the March 23, 1972 issue of Safety Guide 26 (Reg. Guide 1.26), but were upgraded to ASME Class voluntarily by NMPC. These systems, such as Instrument Air, Nitrogen, Containment Dilution, etc., were originally considered outside the scope of Safety Guide 26 (Reg. Guide 1.26), since the Safety Guide only "describes a quality classification system related to specified industry codes that may be used to determine quality standards that satisfy General Design Criterion 1 for other water- and steam-containing components important to safety of water-cooled nuclear power plants." For systems other than water- or steam-containing, in accordance with IWA-1320, specific testing requirements are at the option of the owner and are not construed as ASME Code requirements.

The following systems contain augmented components:
1. Reactor Vessel Instrumentation
2. Combustible Gas Control
3. Reactor Building Closed Loop Cooling
4. Reactor Building HVAC
5. Emergency Service Water
6. Emergency Diesel Generator Cooling Water
7. Emergency Diesel Generator Starting Air
8. Emergency Diesel Generator Fuel Oil
9. Emergency Diesel Generator Lube Oil
10. Instrument Air
11. Condensate Transfer
12. Spent Fuel Pool Cooling

1.3.3 Testing Frequency

Component testing will be conducted at the intervals specified in the test tables of Section II and Section III. The time period between successive tests for an individual component shall be approximately the interval duration (i.e., quarterly = 92 days; 6 months = 184 days, etc.). The testing interval and interval extension is governed by Technical Specification 4.0.1.

Pumps that are determined to require an increase in testing frequency, shall be tested at a 46-day interval. For pumps tested only during a cold shutdown, the plant shall be placed in the cold shutdown condition and in the system configuration required to conduct the pump testing.

1.3.4 Cold Shutdown Testing

Each component covered by the IST Program Plan scope that cannot be tested quarterly has been analyzed to determine when appropriate testing may be performed. If operation of a valve is not practical during station operation, OM-10 allows several options, including part-stroke exercising during normal station operation, and full-stroke exercising at cold shutdown.

Since OM-10 allows testing at cold shutdown, this Program Plan does not request relief for those valves for which testing is delayed until cold shutdown. The IST Program Plan provides a Cold Shutdown Justification (CSJ) for the delay of testing until cold shutdown. A CSJ is prepared for each valve or group of valves that requires a deferred testing schedule. These justifications are prepared in a format similar to relief requests, and are included following the Valve Test Table in Attachment 1 through 27, as applicable.

Component testing deferred until cold shutdown should commence within 48 hours of achieving the cold shutdown condition. If testing deferred until cold shutdown has not commenced within 48 hours of achieving the cold shutdown condition, <u>all</u> cold shutdown deferred component testing shall be completed prior to plant start-up.

Once started, component testing shall continue until all component testing is complete or until the plant is ready to return to power. Completion of cold shutdown component testing is not a prerequisite to return to power, except as noted above. Any testing not completed at one cold shutdown should be preferentially scheduled for testing at subsequent cold shutdowns, where possible. Normal cold shutdown component testing is not required if less than 92 days have elapsed since the last test of that component.

During a refueling outage, <u>all</u> cold shutdown deferred component testing shall be conducted prior to plant start-up.

1.3.5 Refueling Outage Testing

Similarly, since OM-10 permits testing at refueling outages for those cases where cold shutdown testing is impractical, this Program Plan does not request NRC approval for relief for those valves for which testing is delayed until the next refueling outage. Attachment 1 through 27 contain Refueling Outage Justifications (ROJ), as required, to document the basis for delaying testing until the next refueling outage. A ROJ is prepared for each valve or group of valves that require deferment until refueling. These justifications are prepared in a format similar to relief requests, and are included following the Valve Cold Shutdown Justifications for each applicable system. The Code change (from ASME XI to OM-10) resulted in a significant reduction in the number of Relief Requests that must be submitted with the IST Program Plan. Several Relief Requests sought relief in the form of testing on a refueling outage basis for valves that cannot be tested during power operation or during cold shutdown. Those Relief Requests have been rewritten and are now Refueling Outage Justifications.

During a refueling outage, all refueling outage deferred component testing shall be conducted, as specified in the Program Plan.

1.3.6 Testing Abnormalities

During a test of an ASME Code or augmented component, if it is obvious that the test instrumentation is malfunctioning or that a test value has been recorded improperly, the test may be halted, and [1] the test instrumentation calibrated or replaced, or [2] the reading verified and the test resumed.

NOTE: In many situations where anomalous data is indicated or recorded, it may not be clear that the problem lies with the test instrumentation or the recorded data. In these cases, the problem shall be assumed to be the performance of the component being tested.

1.3.7 Timely Analysis of Data

Test data shall be reviewed for acceptability during the same shift as test performance, when possible. The component shall be declared immediately inoperable if test results show deviations greater than allowed. The course of action taken shall be documented in the record of test.

1.3.8 Component Operability

The rework or repair of existing components or the installation of new components (due to system modifications or component replacement), requires testing to ensure satisfactory operation. Post maintenance tests (PMTs) or modification functional tests (MFTs), used to declare operability, establish the start of the interval for the component tested. Commencement of the interval should be documented in accordance with approved plant procedures upon the completion of the required testing or upon the Operations Acceptance of the component, whichever is more limiting.
Failure to test a component within the required interval requires the component to be declared inoperable. Prior to declaring the component operable:

1. The program plan applicable testing requirements (for the affected parameter) must be satisfactorily conducted, and
2. Each additional component program plan testing requirement is verified to have been satisfactorily conducted within its required periodicity (i.e., all testing is current).

For a component failing to achieve a required testing requirement, the test data may be analyzed to determine the cause of the deviation and the component may be shown to be operating acceptably. The evaluation results must be documented in the record of test.

1.4 DEFINITIONS

The terms below, when used in the Pump and Valve Inservice Testing Program Plan, are defined as follows:

COLD SHUTDOWN	Plant condition when reactor coolant temperature is ≤212 °F with the mode switch in the shutdown or refuel position.
CONTAINMENT ISOLATION VALVE (CIV)	Any valve which is relied upon to perform a containment isolation function.
CORRECTIVE ACTION [for OM-10, 4.2.2.3(f)]	Activities that meet the Code definition of Repair, Replacement, or Maintenance; or that are listed as non-code activities in NIP-IIT-01; or that are listed in GAP-SAT-02, Attachment 1.
DESIGN ACCIDENT FLOW	The limiting flow value utilized in the Design Basis Accident (DBA) analyses.
IMPRACTICAL	A condition where the OM test requirements cannot be fulfilled or performed based on the present plant configuration or design.
OBTURATOR	Valve closure member (e.g., disk, gate, plug, ball, etc.).
OPERATING CYCLE	That portion of station operation between reactor startups following each refueling outage.
PRESSURE ISOLATION VALVE (PIV)	Those valves listed in TS 3.2.7.1 that act as an isolation boundary between the high pressure reactor coolant system and a system having a lower operating or design pressure.
REFERENCE VALUES	One or more values of test parameters measured or determined when the equipment is known to be operating acceptably.
REFUELING OUTAGE	That portion of station operation required for the regularly scheduled refueling of the reactor.
SKID-MOUNTED COMPONENT	Components, supplied by the manufacturer of major equipment (e.g., Emergency Diesel Generator, AC unit, etc.), that are integral to or that directly support operation of the major equipment, regardless of location (e.g., diesel fuel oil pumps, solenoid-operated valves provided to control an air-operated valve, etc.).

1.5 REFERENCES

1. ASME Boiler and Pressure Vessel Code, Section XI, Rules for Inservice Inspection of Nuclear Power Plant Components, 1989 Edition
2. ASME/ANSI Operations and Maintenance Standard, Parts 1, 6, 10, 1987 Edition including the 1988 OMa addenda
3. NMP1-IST-001, NMP1 Pump and Valve Inservice Testing Program Plan, 2nd Ten-Year Interval
4. Technical Specifications, Niagara Mohawk Power Corporation, Nine Mile Point Nuclear Station Unit 1
5. Final Safety Analysis Report (Updated), Nine Mile Point Nuclear Station Unit 1
6. 10CFR50.55a(f), Inservice Testing Requirements
7. Nine Mile Point Station Unit 1 MEL1 database
8. Nine Mile Point Station Unit 1 ASME Section XI Boundary Diagrams
9. Nine Mile Point Station Unit 1 Piping and Instrumentation Diagrams, Q List
10. Deleted
11. Safety Guide 26 (Reg. Guide 1.26), Quality Group Classifications and Standards, dated March 23, 1972
12. NUREG-0800, Standard Review Plan Section 3.9.6, Inservice Testing of Pumps and Valves
13. NUREG-1482, Guidelines for Inservice Testing at Nuclear Power Plants
14. GL 89-04, Guidance on Developing Acceptable Inservice Testing Programs, including Supplement 1
15. NUREG/CR-6396, Examples, Clarifications, and Guidance on Preparing Requests for Relief from Pump and Valve Inservice Testing Requirements
16. NMP1-APPJ-001, 10CFR50 Appendix J Testing Program Plan
17. NIP-IIT-01, ASME Section XI Programs
18. GAP-PSH-02, Preventive Maintenance and Surveillance Test Database
19. GAP-SAT-02, Pre/Post Maintenance Test Requirements
20. NEP-ECA-01, Engineering Supporting Analysis
21. Internal Correspondence, File Code 54299, K.B. Thomas to P.F. Francisco, dated February 7, 1990: Subject: Instrument Air and Containment Atmosphere Dilution (CAD) Systems
22. Internal Correspondence, File Code (no code), D.J. Wolniak to K.B. Thomas, dated February 21, 1990: Subject: ASME Classification of Instrument Air and Nitrogen Systems
23. Internal Correspondence, File Code (SM-ISI92-0061), M.S. Leonard to D.J. Wolniak, dated March 2, 1992: Subject: ASME Classification of Gas Systems - Unit 1
24. DER 2-98-0298, Failure to Evaluate Relief Requests
25. C.V. Mangan to D.B. Vassallo, NRC; first interval extension due to recirculation system piping and safe-end work, September 13, 1983
26. Internal Correspondence, File Code (NMP1-M98-030), W.S. McLeod/T.G. Mogren to Larry Lukens, dated October 20, 1998: Subject: Manual Valves, IST Program Third Ten-Year Interval.

27. NRC Correspondence (from Second Ten-Year Program)

1. NRC Letter, TAC 65888, dated March 29, 1988, from R.A. Capra to C.V. Mangan, "Relief Request Transmitted by Letter Dated July 8, 1987 for Nine Mile Point Unit 1"
2. NRC Letter, TAC 60450, dated March 3, 1988, "Nine Mile Point 1 Inservice Testing Program - Summary of September 9 and 10, 1987 Meeting"
3. NRC Letter, TAC 54152, dated May 6, 1988, from R.A. Capra to C.V. Mangan, "Proposed Technical Specifications and Exemption Requests Related to Appendix J"
4. NRC Letter, TAC 68462, dated October 17, 1988, from R.A. Capra to C.V. Mangan, "Schedular Exemption from the Requirements of Appendix J to 10CFR50 for the Emergency Condenser Condensate Return Line Valves"
5. NRC Letter, TAC 54152, dated November 9, 1988, from M.F. Haughey to C.V. Mangan, "Review of the July 28, 1988 Letter on Appendix J Containment Leakage Rates Testing at Nine Mile Point Unit 1"
6. NRC Letter, dated March 10, 1989, "Summary of Meeting with Niagara Mohawk Power Corporation on February 22 and 23, 1989 to Discuss the Pump and Valve Inservice Test Interface Program for Nine Mile Point, Unit 1"
7. NRC Letter, TAC 60450, dated August 10, 1989, "Nine Mile Point Nuclear Station Unit No. 1 Inservice Testing Program"
8. NRC Letter, TAC 76410, dated June 22, 1990, "Interim Relief Request PR-8, Emergency Diesel Generator Cooling Water System Pumps 72-62 and 72-63"
9. NRC Safety Evaluation of Second Ten-Year Interval Inservice Testing Program for Pumps and Valves, NMP1 (TAC No. 60450), dated March 7, 1991
10. NRC Safety Evaluation of NMP1 IST Relief Requests CTS-RR-2 and VG-2 (TAC 79447), dated May 30, 1991
11. NRC Safety Evaluation of NMP1 IST Relief Requests MS-RR-1, CS-RR-1, CTS-RR-2 and EDGCW-RR-1 (TAC Nos. M81833 and M83539), dated September 22, 1992.

28. NRC Letter, TAC MA5052, dated April 2, 1999, "Alternative GVRR-6 Regarding Inservice Testing of Safety and Relief Valves in Steam or Compressible Fluid Service, Nine Mile Point Nuclear Station, Unit 2"

2. SECTION II - PUMP IST PROGRAM PLAN

2.1 GENERAL

This section presents the Pump Inservice Testing Program Plan for the 3rd Ten-Year Interval at the Nine Mile Point Nuclear Station Unit 1 (NMP1), in compliance with the requirements of 10CFR50.55a(f) Title 10, Code of Federal Regulations, Inservice Testing Requirements and NMP1 Technical Specification 3.2.6, Inservice Inspection and Testing. The Program Plan was prepared in accordance with the rules of the ASME Boiler and Pressure Vessel Code, Section XI, Division 1, 1989 Edition (ASME Code). The ASME Code, Subsection IWP specifies that the rules for inservice testing of pumps are stated in the ASME/ANSI Operations and Maintenance Standards, Part 6, "Inservice Testing of Pumps in Light-Water Reactor Power Plants" (OM). Table IWA-1600-1 further specifies ASME/ANSI OM (Part 6), 1987 Edition with 1987A revision. OM-1987A was issued as OMa-1988.

The program plan specifies the OM testing requirements for ASME Code Class 1, 2, and 3 pumps provided with an on-site emergency power source and that are required in shutting down a reactor to the safe shutdown condition, maintaining the safe shutdown condition, or mitigating the consequences of an accident. The pump, the test circuit, and the associated instrumentation were analyzed to determine whether the OM testing could be performed. For pumps where the OM requirements are determined to be not practicable, a specific relief request has been prepared. Specific relief requests follow the pump test table. Each specific relief request provides justification for deviation from the OM-specified testing, and proposes appropriate alternate testing.

The program plan also conservatively contains the testing requirements for augmented pumps. These pumps are voluntarily included in the program plan based on their relative importance to nuclear safety and are tested as specified by NMPC. Where possible, the testing requirements of the OM are followed. If the OM testing requirements cannot be conducted for the augmented pumps, test table notes are used to denote such conditions and to show how these pumps are being tested. Changes made to the testing requirements and notes for augmented pumps are at the discretion of NMPC.

The following systems contain augmented pumps:

A. Emergency Diesel Generator Cooling Water
B. Emergency Diesel Generator Fuel Oil
C. Emergency Diesel Generator Lube Oil
D. Condensate Transfer
E. Spent Fuel Pool Cooling

Some emergency diesel generator (EDG) pumps are "skid mounted." Testing of the EDG is an acceptable means for verifying the operational readiness of the skid-mounted pumps.

The exclusion of components from the program plan will be documented in the IST bases document.

2.2 ACCEPTANCE CRITERIA

The acceptable range, alert range, and required action range will be developed based on established reference values. If the operability limits delineated in the NMP1 Mechanical Design Criteria-11 (MDC-11) are within the defined ranges of OM-6, the ranges will be conservatively adjusted to ensure the that operability limits of pumps must always meet, or be consistent with, the licensing basis assumptions in the NMP1 safety analyses.

2.3 SYSTEM AND P&ID LIST

SYSTEM	MEL1 ABBREV.	P&ID	SYSTEM NUMBER
Core Spray	CRS	C-18007-C	40, 81
Spent Fuel Pool Cooling	FP	C-18008-C	54
Containment Spray	CTN-SP	C-18012-C	80, 93
Liquid Poison	LP	C-18019-C	42
Reactor Building Closed Loop Cooling	RBCLC	C-18022-C	70
Emergency Service Water	SW	C-18022-C	72
Emergency Diesel Generator	DG	C-18026-C	79, 79.1, 82
Control Room Chilled Water and HVAC	CRAC	C-18047-C	210.1
Condensate Transfer	CT	C-18048-C	57

2.4 PUMP TABLE ABBREVIATIONS

P_D	Discharge Pressure
ΔP	Differential Pressure
Q_F	Flow Rate
V	Vibration
Q	Quarterly
CS	Cold Shutdown
N	Non-ASME Code Class

2.5 PUMP TEST TABLE SAMPLE

NINE MILE POINT NUCLEAR STATION - UNIT 1

PUMP			P&ID		ASME OM REQUIREMENTS		RELIEF REQ CS JUST RO JUST	NMP1 TESTING		REMARKS
NAME	MEL1 ID	CLASS	NO	COORD	TYPE	FREQ		TYPE	FREQ	
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	

Legend: Numbers in brackets correspond to those found below:
Abbreviations are from Pump Test Table Nomenclature.

- [1] Pump Name
- [2] Pump Unique designator
- [3] Pump Class
- [4] P&ID Number from System Drawing List
- [5] P&ID Coordinates
- [6] ASME OM requirements for Type of Test
- [7] ASME OM requirements for Frequency of Test
- [8] Relief Requests, Cold Shutdown, or Refueling Outage designator (from applicable page)
- [9] NMP1 requirements for Type of Test
- [10] NMP1 requirements for Frequency of Test

2.6 PUMP TEST TABLE

PUMP			P&ID		ASME OM REQUIREMENTS		RELIEF REQ CS JUST RO JUST	NMP1 TESTING		REMARKS
NAME	MEL1 ID	CLASS	NO	COORD	TYPE	FREQ		TYPE	FREQ	
CORE SPRAY #121	PMP-81-03	2	C-18007-C	G-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY #122	PMP-81-04	2	C-18007-C	G-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY #111	PMP-81-23	2	C-18007-C	B-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY #112	PMP-81-24	2	C-18007-C	B-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY TOPPING #112	PMP-81-49	2	C-18007-C	A-4	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY TOPPING #111	PMP-81-50	2	C-18007-C	A-4	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY TOPPING #121	PMP-81-51	2	C-18007-C	H-4	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1
CORE SPRAY TOPPING #122	PMP-81-52	2	C-18007-C	H-4	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	NOTE 1

Pump			P&ID		ASME OM Requirements		Relief Req CS Just RO Just	NMP1 Testing		Remarks
Name	MEL1 ID	Class	No	Coord	Type	Freq		Type	Freq	
Spent Fuel Pool Cooling #11	PMP-54-01	3	C-18008-C	C-4				ΔP Q_F V	Q Q Q	Note 2
Spent Fuel Pool Cooling #12	PMP-54-02	3	C-18008-C	C-5				ΔP Q_F V	Q Q Q	Note 2
Containment Spray Raw Water #112	PMP-93-01	3	C-18012-C SH 1	E-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Containment Spray Raw Water #111	PMP-93-02	3	C-18012-C SH 1	C-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Containment Spray Raw Water #122	PMP-93-03	3	C-18012-C SH 1	G-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Containment Spray Raw Water #121	PMP-93-04	3	C-18012-C SH 1	A-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Containment Spray #122	PMP-80-23	2	C-18012-C SH 2	G-6	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Containment Spray #112	PMP-80-24	2	C-18012-C SH 2	F-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Containment Spray #121	PMP-80-03	2	C-18012-C SH 2	B-6	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1

Pump			P&ID		ASME OM Requirements		Relief Req CS Just RO Just	NMP1 Testing		Remarks
Name	MEL1 ID	Class	No	Coord	Type	Freq		Type	Freq	
Containment Spray #111	PMP-80-04	2	C-18012-C SH 2	C-5	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Liquid Poison #12	PMP-42-38	2	C-18019-C	E-5	P_D Q_F V	Q Q Q		P_D Q_F V	Q Q Q	
Liquid Poison #11	PMP-42-39	2	C-18019-C	E-4	P_D Q_F V	Q Q Q		P_D Q_F V	Q Q Q	
Emergency Service Water #12	PMP-72-03	3	C-18022-C SH 1	D-6	ΔP Q_F V	Q Q Q	PMP-RR-1 PMP-RR-1 PMP-RR-1	ΔP Q_F V	CS CS CS	Note 1
Emergency Service Water #11	PMP-72-04	3	C-18022-C SH 1	C-6	ΔP Q_F V	Q Q Q	PMP-RR-1 PMP-RR-1 PMP-RR-1	ΔP Q_F V	CS CS CS	Note 1
Reactor Building Closed Loop Cooling Water #11	PMP-70-01	3	C-18022-C SH 2	A-5	ΔP Q_F V	Q Q Q	PMP-RR-1 PMP-RR-1 PMP-RR-1	ΔP Q_F V	CS CS CS	Note 1
Reactor Building Closed Loop Cooling Water #12	PMP-70-02	3	C-18022-C SH 2	B-5	ΔP Q_F V	Q Q Q	PMP-RR-1 PMP-RR-1 PMP-RR-1	ΔP Q_F V	CS CS CS	Note 1
Reactor Building Closed Loop Cooling Water #13	PMP-70-03	3	C-18022-C SH 2	C-5	ΔP Q_F V	Q Q Q	PMP-RR-1 PMP-RR-1 PMP-RR-1	ΔP Q_F V	CS CS CS	Note 1
Emergency Diesel Generator #102 Cooling Water	PMP-79-53	3	C-18026-C SH 1	B-6	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1

Pump			P&ID		ASME OM Requirements		Relief Req CS Just RO Just	NMP1 Testing		Remarks
Name	MEL1 ID	Class	No	Coord	Type	Freq		Type	Freq	
Emergency Diesel Generator #102 Cooling Water Circulating	PMP-79-43	N	C-18026-C SH 1	G-4						Note 2,3
Emergency Diesel Generator #102 Cooling Water Circulating	PMP-79-44	N	C-18026-C SH 1	G-5						Note 2,3
Emergency Diesel Generator #102 Fuel Oil Transfer	PMP-82-40	N	C-18026-C SH 1	C-2				P_D Q_F V	Q Q Q	Note 2
Emergency Diesel Generator #102 Motor Driven Fuel Oil	PMP-82-94	N	C-18026-C SH 1	B-1						Note 2,3
Emergency Diesel Generator #102 Shaft Driven Fuel Oil	PMP-82-95	N	C-18026-C SH 1	B-1						Note 2,3
Emergency Diesel Generator #102 Scavenging Lube Oil	PMP-79.1-50	N	C-18026-C SH 1	E-5						Note 2,3
Emergency Diesel Generator #102 Main Lube Oil	PMP-79.1-52	N	C-18026-C SH 1	E-4						Note 2,3
Emergency Diesel Generator #102 Piston Cooling Oil	PMP-79.1-54	N	C-18026-C SH 1	E-5						Note 2,3
Emergency Diesel Generator #102 Turbo Lube Oil	PMP-79.1-01	N	C-18026-C SH 1	E-6						Note 2,3

Pump			P&ID		ASME OM Requirements		Relief Req CS Just RO Just	NMP1 Testing		Remarks
Name	MEL1 ID	Class	No	Coord	Type	Freq		Type	Freq	
Emergency Diesel Generator #102 Circulating Lube Oil	PMP-79.1-07	N	C-18026-C SH 1	E-6						Note 2,3
Emergency Diesel Generator #103 Cooling Water	PMP-79-54	3	C-18026-C SH 2	B-6	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Emergency Diesel Generator #103 Cooling Water Circulating	PMP-79-45	N	C-18026-C SH 2	G-4						Note 2,3
Emergency Diesel Generator #103 Cooling Water Circulating	PMP-79-46	N	C-18026-C SH 2	G-5						Note 2,3
Emergency Diesel Generator #103 Fuel Oil Transfer	PMP-82-41	N	C-18026-C SH 2	B-2				P_D Q_F V	Q Q Q	Note 2
Emergency Diesel Generator #103 Motor Driven Fuel Oil	PMP-82-90	N	C-18026-C SH 2	B-1						Note 2,3
Emergency Diesel Generator #103 Shaft Driven Fuel Oil	PMP-82-91	N	C-18026-C SH 2	B-1						Note 2,3
Emergency Diesel Generator #103 Scavenging Lube Oil	PMP-79.1-51	N	C-18026-C SH 2	E-5						Note 2,3
Emergency Diesel Generator #103 Main Lube Oil	PMP-79.1-53	N	C-18026-C SH 2	E-4						Note 2,3

Pump			P&ID		ASME OM Requirements		Relief Req CS Just RO Just	NMP1 Testing		Remarks
Name	MEL1 ID	Class	No	Coord	Type	Freq		Type	Freq	
Emergency Diesel Generator #103 Piston Cooling Oil	PMP-79.1-55	N	C-18026-C SH 2	E-5						Note 2,3
Emergency Diesel Generator #103 Turbo Lube Oil	PMP-79.1-20	N	C-18026-C SH 2	E-6						Note 2,3
Emergency Diesel Generator #103 Circulating Lube Oil	PMP-79.1-26	N	C-18026-C SH 2	E-6						Note 2,3
Control Room Chilled Water #12	PMP-210.1-36	3	C-18047-C	F-2	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Control Room Chilled Water #11	PMP-210.1-37	3	C-18047-C	F-2	ΔP Q_F V	Q Q Q		ΔP Q_F V	Q Q Q	Note 1
Condensate Transfer #12	PMP-57-11	3	C-18048-C	E-5				ΔP Q_F V	Q Q Q	Note 1,2
Condensate Transfer #11	PMP-57-12	3	C-18048-C	F-5				ΔP Q_F V	Q Q Q	Note 1,2

PUMP TABLE NOTES

1. Differential pressure will be determined either by direct measurement using a single differential pressure gauge or by using inlet (or level information) and discharge pressure (OM-6 Section 4.6.2.2).

2. This Augmented Component is voluntarily included based on its relative importance to nuclear safety and tested per NMPC requirements.

3. This pump is "skid-mounted" on the Emergency Diesel Generator. Testing of the major piece of equipment is an acceptable means for verifying the operational readiness of the skid-mounted and component subassemblies for both ASME Code and Augmented components (NUREG 1482, Section 3.4).

2.7 PUMP RELIEF REQUEST

PMP-RR-1

System: Reactor Building Closed Loop Cooling Water; Emergency Service Water

Pump: PMP-70-01, PMP-70-02, PMP-70-03, PMP-72-03, PMP-72-04

Class: 3

Function: Provide cooling water to Safety Related equipment

Test Requirements:

A. Frequency of flow rate (Q_F) measurement per OM-6, 5.1
B. Effect of Pump Replacement, Repair, and Maintenance on Reference Values per OM-6, 4.4

Basis for Relief: In accordance with 10CFR50.55a(f)(5)(i), relief is requested from the requirements of ASME/ANSI OMa-1988 Part 6, Sections 4.4 and 5.1 based on impracticality as described below. Similar Reliefs and Alternate Testing requirements were approved for the 2nd Ten-Year Program Plan per the Safety Evaluation of March 7, 1991 (TAC NO. 60450) and per the Safety Evaluation of January 10, 1995 (TAC NO. M90927).

A. The Reactor Building Closed Loop Cooling (RBCLC) and the Emergency Service Water (ESW) systems are not fixed resistance systems.

For the RBCLC system, no pump test loops nor individual pump flow instrumentation is installed. The system flow rate and the number of pumps running are a function of the system heat loads. During normal plant operations, system heat loads prevent removing the RBCLC system from service. Additionally, operating conditions do not permit single pump operation.

The ESW installed test line piping configuration does not allow for temporary or permanent flow instrumentation to be installed (i.e., not enough straight runs of piping). Flow instrumentation can be utilized on the Service Water System inter-tie piping to test the ESW pumps. However, the ESW pumps operate at a lower pressure than the Service Water System. During normal plant operations, system heat loads prevent removing a Service Water header from service or de-pressurizing a header.

Therefore, flow rate measurement for the RBCLC and ESW pumps during normal operation is not practical.

Testing can be and is conducted during Cold Shutdowns conditions. In most Cold Shutdown scenarios, it is possible to operate the RBCLC and ESW systems with a single pump and align the systems to achieve OM test conditions without adversely affecting Cold Shutdown plant operations.

B. In order to permit rework/repair/replacement of a RBCLC or an ESW pump while the plant remains operating at power, the determination of a new reference values for all parameters, prior to returning the pumps to an operable condition, is not practical.

The Basis for Relief of the "Frequency of flow rate (Q_F) measurement" is applicable to the post rework/ repair/replacement of an RBCLC or ESW pump. If new reference values must be determined prior to returning the pumps to an operable condition, a plant shutdown to a Cold Shutdown condition is required.

Proposed Alternate Testing:

A. Quarterly, vibration (V) and pump differential pressure (ΔP) shall be measured for each pump. During Cold Shutdowns, flow rate (Q_F) shall be measured for each pump.

B. Pump rework/repair/replacement will be performed in accordance with vendor specifications and maintenance procedures. The post maintenance test results will be evaluated by Engineering to ensure the pump will meet its Safety Related function. Quarterly, until new reference values can be established at the next Cold Shutdown, vibration (V) and pump differential pressure (ΔP) shall be measured and evaluated.

At the next Cold Shutdown, new reference values will be established for pump differential pressure (ΔP), flow rate (Q_F), and vibration (V).

3. SECTION III - VALVE IST PROGRAM PLAN

3.1 INTRODUCTION

This section presents the Valve Inservice Testing Program Plan for the 3rd Ten-Year Interval at Unit 1 of the Nine Mile Point Nuclear Station, in compliance with the requirements of 10CFR50.55a(f) Title 10, Code of Federal Regulations, Inservice Testing Requirements and NMP1 Technical Specification 3.2.6, Inservice Inspection and Testing. The Program Plan was prepared in accordance with the rules of the ASME Boiler and Pressure Vessel Code, Section XI, Division 1, 1989 Edition (ASME Code). The ASME Code, Subsection IWV specifies that the rules for inservice testing of valves are stated in the ASME/ANSI Operations and Maintenance Standards, Part 10, "Inservice Testing of Valves in Light-Water Reactor Power Plants" (OM). Table IWA-1600-1 further specifies ASME/ANSI OM (Part 10), 1987 Edition with 1987A revision. OM-1987A was issued as OMa-1988.

The program plan specifies the OM testing requirements for ASME Code Class 1, 2, and 3 valves, which are required in shutting down a reactor to the safe shutdown condition, maintaining the safe shutdown condition, or mitigating the consequences of an accident. As discussed in NUREG-1482, Paragraph 2.2, Testing of components associated with "safe" shutdown versus the Code required testing of components associated with "cold" shutdown is acceptable provided the IST Program states this special condition in an introductory section. Section 1.2, "General Information", Paragraph 1.2.2, of the IST Program satisfies this requirement. In accordance with NUREG-1482, a relief request is not required for plants licensed with hot shutdown or hot standby as the "safe" shutdown condition. For valves where the OM requirements are determined to be not practicable, a relief request has been prepared. Each relief request provides justification for the deviation from the OM specified testing, and proposes alternate testing. General valve relief requests are contained in Section III. Specific relief requests are contained in the applicable attachment containing the valve test table.

The program plan also contains the testing requirements for augmented valves. These augmented valves are voluntarily included in the program plan based on their relative importance to nuclear safety and are tested as specified by NMPC. Where possible, the testing requirements of the OM are followed. If the OM testing requirements cannot be conducted for these valves, test table notes are used to denote such conditions and to show how these valves are being tested. Changes made to the testing requirements and notes for these valves are at the discretion of NMPC. Included as augmented are those components in systems which were not included in Safety Guide 26 (Reg. Guide 1.26), but were upgraded to ASME Class voluntarily by NMPC. These systems, such as Instrument Air, Nitrogen, Containment Dilution, etc., were originally considered outside the scope of Safety Guide 26 (Reg. Guide 1.26), since the Safety Guide only "describes a quality classification system...for water- and steam-containing components important to safety of water-cooled nuclear power plants." For systems other than water- or steam-containing, in accordance with IWA-1320, specific testing requirements are at the option of the owner and are not construed as ASME Code requirements. Exclusions of components from the program plan will be documented in the IST bases document.

The following systems contain augmented valves:

A. Reactor Vessel Instrumentation
B. Combustible Gas Control
C. Reactor Building HVAC
D. Reactor Building Closed Loop Cooling
E. Emergency Service Water
F. Emergency Diesel Generator Starting Air

G. Emergency Diesel Generator Fuel Oil
H. Emergency Diesel Generator Lube Oil
I. Instrument Air
J. Condensate Transfer
K. Spent Fuel Pool Cooling

3.2 TECHNICAL POSITIONS

The NMP1 technical positions concerning a number of items encountered in preparing the valve program plan are provided below.

3.2.1 Fail-Safe Control Valves

Control valves with a safety function or a required fail-safe position are included in the program plan. The program plan addresses these valves by specifying testing to all applicable OM requirements. These requirements may include exercise, stroke time, and position indication testing, as applicable, and may be accomplished during the Fail-Safe testing.

3.2.2 Automatic Power-Operated Valves

Power-operated valves that receive an automatic signal on system initiation are included in the program plan unless the valve is locked in position and under administrative control. Automatic valves with unqualified actuators are considered manual valves.

3.2.3 Remote Power-Operated Valves

The program plan includes power-operated valves activated by remote switches if they are required to change position to align a system for safety related operation, or to provide containment isolation.

3.2.4 Check Valves - General

As specified in associated tables, Category C check valves that are disassembled and inspected in lieu of full exercising are tested (sampled) in accordance with NRC Generic Letter 89-04, Position 2. Valve groupings are by function, service, design, orientation, and manufacturer. Each valve is disassembled and inspected at least once every six years.

3.2.5 Power-Operated Stop Check Valves

Testing of power-operated stop check valves is based on the safety function of the operator and the valve. If the valve operator is always withdrawn, and the valve operates as a simple check valve except during maintenance, the valve is tested as a simple check. If the operator is normally withdrawn, such that the valve operates as a simple check in the forward direction, and the operator provides positive closure, it is tested as a simple check in the forward direction and exercised closed, using the operator. In addition to exercising, the valve will be stroke time and fail-safe tested as appropriate.

3.2.6 Excess Flow Check Valves

The excess flow valves installed at NMP1 are flow limiting devices. The valves are designed to minimize the loss of reactor coolant in the event of an instrument line break to within the capability of the control rod drive (reactor makeup) pumps. These ASME Class valves are located within the Secondary Containment. The radiological consequences of an instrument line break are mitigated by the reactor building emergency ventilation system.

The valves are tested by simulating a line break downstream from the check valve by opening a manual drain and bypass valve to initiate flow. Valve closure is determined by audible indication (i.e., aurally), since visual observation of flow cessation is not possible - the drain piping is hard piped. This testing methodology was previously approved per the Safety Evaluation of March 7, 1991 (TAC NO. 60450)

3.2.7 Vacuum Relief Valves

At NMP1, vacuum relief valves provide external over-pressure protection in certain systems. These valves are located where a specific maximum differential pressure (vacuum) can not be exceeded. Valves providing such protection are tested in accordance with the requirements of OM-1. Simple check valves used to minimize the formation of a high water leg in a line to prevent high clearing loads are tested in accordance with the requirements of OM-10.

3.2.8 Check Valve Full/Partial Stroke

In certain cases, design accident flow through a check valve requires less than full mechanical valve movement. As used in the program plan, the term "full-stroke" refers to the ability of the valve to pass the design accident flow. Forward flow full-stroke testing will be by any method that verifies the valve is capable of passing the design accident flow. Tests that verify less than the design accident flow capability are considered partial-stroke tests.

3.2.9 Pressure Isolation Valve Leak Testing

Valves that perform a pressure isolation function between the reactor coolant system and a low pressure system are included in the program plan as Category A valves. PIVs are tested to the acceptance criteria of the NMP1 Technical Specifications. Valves which perform both a containment isolation and a pressure isolation function are included in the Program Plan and are tested to the requirements of both the 10CFR50 Appendix J Testing Program Plan and the OM.

3.2.10 Containment Isolation Valve Leak Testing

Containment Isolation Valves (CIVs) subject to OM-10 Section 4.2.2.2 leakage rate testing results are analyzed in accordance with OM-10 Section 4.2.2.3(e) and corrective actions are taken in accordance with Section 4.2.2.3(f) per the requirement of 10CFR50.55a(b)(2)(vii). The Appendix J Testing Program Plan implements these requirements for the IST program plan. The Appendix J program governs the testing requirements, the evaluation process, and contains the corrective action limits for CIVs. The IST program plan reflects the list of valves tested in accordance with the Appendix J program. Changes to the Appendix J program are incorporated into the IST program plan, as applicable.

CIVs that also provide a reactor coolant system pressure isolation function are subject to the additional requirements of OM-10 Section 4.2.2.3.

3.2.11 Valve Timing

NMP1 procedures control the establishment and documentation of stroke time reference values and limiting values. Some power-operated valves are grouped together on a common control switch. Valves tested as a group will be identified in the valve test tables.

3.2.12 Valve Fail-Safe Testing

OM-10 Section 4.2.1.6 requires proper operation of valves equipped with fail-safe actuators to be observed. For NMP1, this is generally accomplished by placing the control switch to the position which removes the motive force from the actuator and observing valve operation. In cases where the normal valve control circuit can not be actuated, an alternate means is employed to remove the motive force, thereby simulating the normal control circuit function.

3.2.13 System 44, Control Rod Drive

Portions of System 44, Control Rod Drive (Subsection III-5) perform an active safety function in scramming the reactor. The components include the scram discharge volume vent and drain valves, the scram inlet and outlet valves, the scram discharge header check valves, the charging water header check valves, and the cooling water header check valves. Exercising the scram inlet, scram outlet, and the scram discharge header check valves can result in the rapid insertion of one or more control rods with a corresponding change in core reactivity. Exercising also imposes unnecessary wear and tear on control rod drive mechanisms and the lower region of the reactor vessel due to thermal and hydraulic shock. Exercising quarterly during power operation or during cold shutdowns for the sole purpose of verifying stroke time and proper operation of these valves is undesirable and unwarranted. TS 3.1.1, Control Rod Scram Insertion Time testing serves to verify operation and operability of each of these valves.

Exercising of the HCU cooling water check valve is demonstrated by the ability to achieve normal control rod motion. Control rod motion may not be achieved unless the cooling water check valve has moved to the safety (closed) position. Control rods that are fully inserted are determined to be in the safe position. For control rods that are in the safe position, the HCU cooling water check valve is not required to be exercised.

Exercising of the HCU charging water check valves is impractical, since the lines cannot be individually isolated. Exercising these valves requires de-pressurizing and venting both the charging and cooling water headers. Any time that fuel is in the reactor vessel, exercising is impractical since the control rod drive system is in continuous operation. Also, during Cold Shutdown conditions, exercising of these valves is undesirable since depressurizing and venting the headers results in gas intrusion, requiring excessive time to vent the 129 control rod drive units. TS 3.1.1, Control Rod exercising serves to verify operation of each of these valves.

3.3 SYSTEM AND P&ID LIST

SYSTEM	MEL1 ABBREV	P&ID	SYSTEM NUMBER	ATTACHMENT NUMBER
Automatic Depressurization	ADS	C-18002-C	01, 66	1
Breathing Air & Service Water to Drywell	BA/SW	C-18027-C C-18578-C	72,114	2
Control Room Chill Water and HVAC	CRAC	C-18047-C	210, 210.1	3
Control Rod Drive	CRD	C-18016-C	44, 44.2, 44.3	4
Core Spray	CRS	C-18007-C	40, 81	5
Condensate Transfer	CT	C-18003-C C-18008-C C-18035-C C-18048-C	50, 53, 57, 57.1, 59	6
Combustible Gas Control	CTN	C-18014-C	201, 201.1, 201.2, 201.8, 201.9	7
Hydrogen-Oxygen Monitoring	CTN(H_2O_2)	C-18014-C	201.2, 201.7	8
Containment Spray	CTN-SP	C-18012-C	80, 93	9
Clean Up	CU	C-18009-C	33, 37	10
Emergency Diesel Generator Cooling Water, Air Start, Fuel Oil, Lube Oil	DG	C-18026-C	79, 96, 82, 79.1	11
Emergency Cooling	EC	C-18017-C	05, 36, 39, 60	12
Spent Fuel Pool Cooling	FP	C-18008-C	54	13
Feedwater	FW/HPCI	C-18005-C	31	14
Instrument Air	IA	C-18011-C	94, 113	15
Liquid Poison	LP	C-18019-C	42, 42.1	16
Main Steam	MS	C-18002-C	01, 37	17
Traversing Incore Probe (TIP)	NEU	C-18014-C C-19405-C	36, 201.2	18
Primary Containment Vacuum Relief	PCS	C-18006-C	68	19
Reactor Building HVAC	RBAC	C-18013-C	202, 203	20
Reactor Building Closed Loop Cooling	RBCLC	C-18008-C C-18018-C C-18022-C C-18047-C	70	21
Reactor Recirculation	RR	C-18015-C C-18020-C	32, 44.1	22
Waste Disposal	RWS	C-18045-C	83.1	23
Reactor Vessel Instrumentation	RXVI	C-18015-C C-18016-C	36	24
Shutdown Cooling	SDC	C-18007-C C-18018-C	38	25
Sampling	SS	C-18020-C C-18041-C	110, 122	26
Emergency Service Water	SW	C-18022-C C-18027-C	72	27

3.4 VALVE TABLE ABBREVIATIONS

VALVE TYPE

BFV	Butterfly
BLV	Ball
CHV	Check
DIV	Diaphragm
EFV	Excess Flow Check
EXV	Explosive
GLV	Globe
GTV	Gate
PGV	Plug
REV	Relief
RD	Rupture Disk
SCV	Stop-Check
TWV	Three-Way
VRV	Vacuum Relief

STROKE DIRECTION

O	Closed to Open
C	Open to Closed

EXERCISE DIRECTION

F	Forward
R	Reverse

VALVE STATUS

ACT	Active
PASS	Passive

TEST FREQUENCY

CS	During Cold Shutdown
OC	Once per Operating Cycle
P	Per Appendix J Testing Program Plan
Q	Once per 92 days (quarterly)
R	During Refuel Outages
-S	On a sampling basis
6M	Every 6 months
2Y	Every 2 years
4Y	Every 4 years
5Y	Every 5 years
10Y	Every 10 years
TS	Per Technical Specifications

ACTUATOR TYPE

AOA	Air or Nitrogen
EXA	Explosive
MAA	Manual
MOA	Motor
SEA	Self
SOA	Solenoid

VALVE POSITION

AI	As-Is
O	Open
C	Closed
DE	System condition dependent
LC	Locked Closed
LO	Locked Open
NA	Fail position for Non-Power-Operated Valves
OC	Open & Closed

OM-10 TEST REQUIREMENTS

DI	Disassembly and Inspection
EX	Explosive per Section 4.4.1
FE	Full-Stroke Exercise
FS	Fail-Safe
LJ	Leakage per Section 4.2.2.2
LK	Leakage per Section 4.2.2.3
PE	Partial-Stroke Exercise
PI	Remote Position Indication Verification
ST	Stroke-Time
NA	No Code Test Requirement

OM-1 TEST REQUIREMENTS

RT	Visual Examination, As-Found Seat Tightness, Set Pressure, As-Left Seat Tightness, and as required - Accessory and/or Functional
RD	Rupture Disk Replacement
VT	Vacuum Relief Actuation, Set Pressure, Position Indication
LL	Owners seat tightness

3.5 VALVE TEST TABLE SAMPLE

NINE MILE POINT NUCLEAR STATION - UNIT 1

VALVE NO. [1]	ASME CLASS [2]	PID COORD [3]	IST CAT [4]	SIZE TYPE [5]	ACTU TYPE [6]	POSITION NORM/SAFE/FAIL [7]	ASME OM REQUIRED TEST–FREQ [8]	RELIEF REQ C.S. JUST. RFO JUST. [9]	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR) [10]	REMARKS

Legend: Numbers in brackets correspond to those below:
Abbreviations are from Valve Test Table Abbreviations.
Required tests are listed in no specific order.

[1] Valve MEL1 Component ID and Description
[2] ASME Class (1, 2, 3, or N)
[3] P&ID Number, Sheet, and Coordinates
[4] IST Category (A, B, C, or D), and Active or Passive
[5] Valve nominal diameter in inches and valve type from Valve Table Abbreviations
[6] Actuator Type
[7] Valve Position: normal position / position to fulfill safety function / position on loss of motive force
[8] OM-1 or OM-10 requirements for type of test and frequency of test
[9] Relief Request, Cold Shutdown Justification or Refueling Outage Justification
[10] Program Commitments for Type of Test, Frequency of Test, Stroke direction for power operated valves, and Exercise direction for check valves

3.6 GENERAL VALVE RELIEF REQUESTS/PROPOSED ALTERNATIVES

GEN-VR-1

System : Combustible Gas Control
H_2-O_2 Monitoring

Valves : IV-201.1-09, IV-201.1-11, IV-201.1-14, IV-201.1-16
IV-201.2-109, IV-201.2-112, IV-201.2-110, IV-201.2-111,
IV-201.7-01, IV-201.7-02, IV-201.7-08, IV-201.7-09,
IV-201.7-10, IV-201.7-11

ASME Class : 2

Category : A

Function : Provide containment isolation.

Test Requirements : Individual Stroke-Time [ST] testing per OM 10 4.2.1.4, Individual Stroke Time Acceptance Criteria of OM 10-4.2.1.8, and Individual Corrective Action of OM 10 4.2.1.9.

Basis For Relief : In accordance with 10CFR50.55a(a)(3)(i), relief is requested from the requirements of ASME/ANSI OMa-1988 Part 10, Section 4.2.1, on the basis that the proposed alternatives would provide an acceptable level of quality and safety as described below. A similar relief and alternate testing requirements were approved for the 2nd Ten-Year program plan in the Safety Evaluation of March 7, 1991 (TAC NO. 60450).

These pneumatically operated valves are grouped together on common control switches. The groups are:

- IV-201.1-09 & IV-201.1-11
- IV-201.1-14 & IV-201.1-16
- IV-201.7-08, IV-201.7-09, IV-201.7-10, & IV-201.7-11
- IV-201.2-109, IV-201.2-112, IV-201.2-110, IV-201.2-111, IV-201.7-01, & IV-201.7-02

These arrangements have a common close light (green) for a group of valves and individual open lights (red) for each valve.

Reference values are established for each group by timing the valves for at least three exercises. The exercising is conducted over a sufficient interval to prevent erroneous data due to pre-conditioning. An individual reference value is developed for each valve in a group. A composite (group) reference value is developed by averaging the individual reference values. Typically, the individual valves reference values are within ½ second of the group reference value.

Basis For Relief (cont'd) : As needed, primarily after rework or repair, the individual reference values and the group reference value are re-established.

This group reference value is used as a common reference value for each valve in the group. The valve stroke-time test uses switch-actuation-to-red-light-out (closed indication) for open-to-close stroke time. The stroke-time of the slowest valve is observed and recorded. Typically, the slowest valve is not always the same component ID. If the slowest valve exceeds the acceptance criterion (i.e., ± 50% of the group reference value), the group is declared inoperable. Corrective Action per OM 10 is then taken.

The group reference values are <10 seconds, significantly below the Technical Specification limiting value of 60 seconds. While some performance degradation is masked by this testing methodology, nuclear safety will not be compromised. Prior to any valve degrading and exceeding the limiting value of 60 seconds, the acceptance criterion would be significantly exceeded, and corrective action would be taken.

Individually stroke-timing of these valves is a burden, with no commensurate gain in nuclear safety. The proposed alternate testing method provides an adequate capability to monitor and detect individual valve degradation prior to exceeding the Technical Specification limiting value.

Proposed Alternate Testing :

- Establish individual reference values, group reference values, and group acceptance criteria.
- Stroke-time (ST) the valve group, recording the slowest operating valve and the corresponding stroke-time.
- Compare the slowest valve stroke-time to the acceptance criterion to determine the valve group operability status.
- As necessary, take corrective actions for exceeding the acceptance criterion

GEN-VR-2

System : Various

Valves : Safety and Relief Valves in Steam or Compressible Fluid Service

ASME Class : 2 and 3

Category : C and A/C

Function : Provide overpressure protection.

Test Requirements : For inservice testing (IST), Nine Mile Point Nuclear Station Unit 1 (NMP1) is committed to ASME Boiler and Pressure Vessel Code Section XI ("ASME Section XI"), 1989 Edition for the third ten-year interval. ASME Section XI, 1989 Edition, directs that valve testing shall be performed in accordance with OMa-1988, Part 10 (OM-10). OM-10 further directs that relief valve testing shall be performed in accordance with OM-1987, Part 1 (OM-1). For testing of safety and relief valves used in compressible fluid service (air and steam), OM-1 Subsections 4.1.1.2 and 4.1.2.2 require that the minimum accumulator volume below the valve inlet based on valve capacity (cu ft) be calculated from the following formula:

$$\text{Minimum Volume} = \frac{[\text{valve capacity } (ft^3/sec) * \text{time open (sec)}]}{10}$$

Basis For Relief : The proposed alternative is justified on the basis that it provides an acceptable level of quality and safety.

OM-1, as incorporated by reference in ASME Section XI 1989 Edition, specifically requires a minimum accumulator size for relief valve testing. The applicable Code used for relief valve testing prior to OM-1 was PTC 25.3-1976, as required by IWV-3512 of ASME Section XI, 1983 Edition, Summer 1983 Addenda. The PTC did not specify an accumulator volume for bench testing. Instead it stated that "bench testing may also be permitted with test stands having limited accumulator volume and/or pressure source capacity". The PTC goes on to specify that these bench tests may only be used for determination of the valve set-pressure and valve leakage.

Appendix I of OM-1995 (through OMb-1997 Addenda) and Appendix I of OM-1998, while not currently endorsed by the NRC, deleted the accumulator volume calculation and specify in Sections I 4.1.1(b) and I 4.1.2(b) that, "The volume of the accumulator drum and the pressure source flow rate shall be sufficient to determine the valve set-pressure."

Basis For Relief (cont'd) : NMPC believes that the purpose of the minimum accumulator volume specified in OM-1 is to ensure that there is sufficient pressure and flow to prevent seat or disc damage during setpoint testing due to valve "chattering". NMPC proposes that a physical volume identifiable as an "accumulator" is not necessary to satisfy the requirement in OM-1995 that "the volume of the accumulator drum and the pressure source flow rate shall be sufficient to determine the valve set-pressure."

Set-pressure testing of relief valves conducted during the first two intervals on a test bench without an accumulator demonstrated satisfactory valve set-pressure characteristics. The test bench used is connected to a high pressure (at least double the relief valve set pressure) air cylinder through a pressure regulator and a needle test valve. The test procedure requires at least two consecutive "pops" within 3% of the valve set-pressure. This demonstrates that the test bench volume, combined with the air cylinder volume and flow rate, is sufficient to determine the valve set-pressure. Additionally, the post-testing seat leakage required by OM-1 will demonstrate that no valve seat or disc damage has occurred during set pressure testing. Previous relief valve testing performed at Nine Mile Point Unit 2 to OM-1 testing requirements, except utilization of a test bench without an accumulator, has demonstrated satisfactory test performance based on consecutive lifts within 3% with no excessive post-lift seat leakage.

To summarize, the test method provided by the relief valve test bench without an accumulator is consistent with the test method prescribed by the 1983 ASME Section XI, OM-1995, and OM-1998. Only OM-1 (endorsed by ASME Section XI, 1989 Edition and 10CFR50.55a) requires a specific accumulator volume for the relief valve test bench. The use of the safety/relief valve test bench without an accumulator provides a set-pressure testing method consistent with the requirements of PTC 25.3-1976 and OM-1995.

Therefore, the proposed alternative is justified based on the fact that it provides an acceptable level of quality and safety. Similar alternate testing was approved for Nine Mile Point Unit 2 in NRC letter dated April 2, 1999; Subject: Alternative GVRR-6 Regarding Inservice Testing of Safety and Relief Valves in Steam or Compressible Fluid Service, Nine Mile Point Nuclear Station, Unit No. 2 (TAC NO. MA5052) with attached SER.

Proposed Alternate Testing : Pursuant to 10 CFR 50.55a(3), for safety valves and relief valves used in compressible fluid service (air and steam), a test device shall be acceptable if, in accordance with OM-1995 Sections I 4.1.1(b) and I 4.1.2(b), the combination of accumulator volume under the valve inlet and pressure source flow rate is sufficient to determine the valve set-pressure. With the exception of the accumulator volume requirements, all other aspects of safety valve and relief valve testing shall be conducted in accordance with OM-1987, Part 1 ("OM-1").

3.7 ATTACHMENTS: VALVE TESTING TABLES

SYSTEM: AUTOMATIC DEPRESSURIZATION SYSTEM (ADS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-01-102A ADS-3	1	C-18002-C SH 1 B-3	B ACT	6 GLV	SOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y	ADS-ROJ-1	FE–R ST–R (O&C) FS–R (C) PI–2Y	NOTE 1 NOTE 2
PSV-01-102B ADS-1	1	C-18002-C SH 1 B-2	B ACT	6 GLV	SOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y	ADS-ROJ-1	FE–R ST–R (O&C) FS–R (C) PI–2Y	NOTE 1 NOTE 2
PSV-01-102C ADS-2	1	C-18002-C SH 1 C-2	B ACT	6 GLV	SOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y	ADS-ROJ-1	FE–R ST–R (O&C) FS–R (C) PI–2Y	NOTE 1 NOTE 2
PSV-01-102D ADS-4	1	C-18002-C SH 1 C-3	B ACT	6 GLV	SOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y	ADS-ROJ-1	FE–R ST–R (O&C) FS–R (C) PI–2Y	NOTE 1 NOTE 2
PSV-01-102E ADS-5	1	C-18002-C SH 1 B-3	B ACT	6 GLV	SOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y	ADS-ROJ-1	FE–R ST–R (O&C) FS–R (C) PI–2Y	NOTE 1 NOTE 2

SYSTEM: AUTOMATIC DEPRESSURIZATION SYSTEM (ADS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-01-102F ADS-6	1	C-18002-C SH 1 C-3	B ACT	6 GLV	SOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y	ADS-ROJ-1	FE–R ST–R (O&C) FS–R (C) PI–2Y	NOTE 1 NOTE 2
CKV-66-07 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-08 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-09 VACUUM BKR	2	C-18002-C SH 1 B-2	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-10 VACUUM BKR	2	C-18002-C SH 1 B-2	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-11 VACUUM BKR	2	C-18002-C SH 1 D-2	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3

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TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: AUTOMATIC DEPRESSURIZATION SYSTEM (ADS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-66-12 VACUUM BKR	2	C-18002-C SH 1 D-2	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-13 VACUUM BKR	2	C-18002-C SH 1 D-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-14 VACUUM BKR	2	C-18002-C SH 1 D-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-15 VACUUM BKR	2	C-18002-C SH 1 D-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-16 VACUUM BKR	2	C-18002-C SH 1 D-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-17 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-18 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	4 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3

SYSTEM: AUTOMATIC DEPRESSURIZATION SYSTEM (ADS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-66-25 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-26 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-27 VACUUM BKR	2	C-18002-C SH 1 B-2	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-28 VACUUM BKR	2	C-18002-C SH 1 B-2	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-29 VACUUM BKR	2	C-18002-C SH 1 D-2	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-30 VACUUM BKR	2	C-18002-C SH 1 D-2	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-31 VACUUM BKR	2	C-18002-C SH 1 D-3	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: AUTOMATIC DEPRESSURIZATION SYSTEM (ADS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-66-32 VACUUM BKR	2	C-18002-C SH 1 D-3	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-33 VACUUM BKR	2	C-18002-C SH 1 D-4	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-34 VACUUM BKR	2	C-18002-C SH 1 D-4	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-35 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3
CKV-66-36 VACUUM BKR	2	C-18002-C SH 1 B-3	C ACT	10 CHV	SEA	DE / OC / NA	FE–Q	ADS-ROJ-2	FE–R (F&R)	NOTE 3

NOTES FOR AUTOMATIC DEPRESSURIZATION VALVE TABLE

1. Position indication verification is performed for the ADS pilot valve solenoid plunger; there is no provision for monitoring the main valve obturator position.

2. The ADS electromatic relief valves are not credited to provide over-pressure protection for the safety valve actuation event (Overpressurization Analysis) in the NMP1 UFSAR Transient and Accident Safety Analyses. Additionally, the ADS valve assembly is not self-actuating. The design of an ADS electromatic relief valve assembly is unique in that steam pressure holds the valve closed; neither the pilot valve nor the main valve obturators were designed to operate independently of the solenoid plunger or from directly applied pressure. A single valve assembly consists of a pilot solenoid, a pilot valve, and a main valve. The actuation of the main valve is controlled by the pilot valve which is operated by the pilot solenoid. The pilot solenoid is controlled by an initiating signal from a remote manual control switch, a pressure switch, or a logic system that evaluates multiple plant parameters. The pilot valve obturator moves only after a signal energizes the pilot solenoid and the solenoid plunger moves. Then, when sufficient differential pressure is established across a balance chamber and the main valve obturator, the main valve obturator will move, passing flow. The main valve obturator will close as a result of an electrical power loss or a signal loss to the pilot solenoid, by the plunger retracting, the pilot obturator closing, causing the main valve obturator to close.

3. The attributes utilized to test the valve are:

    - Full-stroke exercise open by hand
    - Inspect for foreign material
    - Inspect for damaged seat and disc
    - Gravity or spring return to close position

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
ADS-ROJ-1

System	:	AUTOMATIC DEPRESSURIZATION
Valve(s)	:	PSV-01-102A, PSV-01-102B, PSV-01-102C PSV-01-102D, PSV-01-102E, PSV-01-102F
IST Category	:	B
ASME Class	:	1
Function	:	Automatic and manual depressurization of the reactor vessel and actuation prevention of the reactor vessel head safety valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4; Fail-safe in accordance with OM-10, para. 4.2.1.6
Refueling Outage Test Justification	:	Exercising of the ADS electromatic relief valve assembly during power operation causes a discharge of nuclear steam into the suppression pool (Torus). If the main valve obturator fails to re-seat (close) after testing, the plant would be placed in a loss-of-coolant transient condition, necessitating an unplanned shutdown and outage. In addition, a study (BWR Owners Group Evaluation of NUREG-0737, Item II.K.3.16, Reduction of Challenges and Failures of Relief Valves) recommends that the number of ADS valve openings be reduced as much as possible. Based on this study and the potential for causing a loss-of-coolant transient, exercise testing of the ADS valves assemblies will be performed during plant startup following refueling outages. During the 2nd Ten-Year Interval, this justification was approved as a relief request per the Safety Evaluation of September 22, 1992 (TAC NOS. M81833 AND M83539).
Quarterly Partial Stroke Testing	:	The valves do not have a partial stroke capability.
Cold Shutdown Testing	:	Valve testing requires the plant pressure to be above 900 psig to ensure proper valve operation. As discussed above, testing at a cold shutdown frequency would be contrary to the guidance provided in NUREG-0737.
Refueling Outage Testing	:	Each ADS valve assembly will be exercised (FE), stroke-time tested (ST), and fail-safe tested (FS) with nuclear steam above 900 psig operating pressure during plant startup following refueling outages.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
ADS-ROJ-2

System	:	AUTOMATIC DEPRESSURIZATION
Valve(s)	:	CKV-66-07, CKV-66-08, CKV-66-09, CKV-66-10, CKV-66-11, CKV-66-12, CKV-66-13, CKV-66-14, CKV-66-15, CKV-66-16, CKV-66-17, CKV-66-18, CKV-66-25, CKV-66-26, CKV-66-27, CKV-66-28, CKV-66-29, CKV-66-30, CKV-66-31, CKV-66-32, CKV-66-33, CKV-66-34, CKV-66-35, CKV-66-36
IST Category	:	C
ASME Class	:	2
Function	:	The check valves are located on the ADS electromatic relief valve discharge lines to the suppression pool (Torus) to minimize the temporary formation of a high water leg in the line after initial ADS valve actuation; thereby preventing high clearing loads during subsequent ADS valve actuation.
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	The check valves are located inside the primary containment with no means for remotely observing operation of the valve obturators. Exercising these valves must be performed from inside primary containment. Since the primary containment is inerted with nitrogen, access is not available on a quarterly or cold shutdown basis.
Quarterly Partial Stroke Testing	:	The conditions required for a partial stroke test are the same as those for a full stroke test.
Cold Shutdown Testing	:	Testing during cold shutdown would require deinerting the containment. Deinerting to perform inservice testing is not required. (NUREG. 1482, Section 3.1.1.3)
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: BREATHING AIR TO DRYWELL (BA)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-114-114 BA OUTBOARD IV .X-121	2	C-18578-C	A PASS	1 GLV	MAA	LC / C / NA	LJ		LJ–P	
IV-114-116 BA INBOARD IV X-121	2	C-18578-C	A PASS	1 GLV	MAA	C / C / NA	LJ		LJ–P	

THIRD TEN YEAR I[illegible]RVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTROL ROOM CHILLED WATER AND HVAC (CRAC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-210.1-01 COOLER INLET	3	C-18047-C E-3	B ACT	3 PGV	AOA	DE / O / O	FE–Q ST–Q FS–Q		FE–Q ST–Q (O) FS–Q (O)	
BV-210.1-02 COOLER INLET	3	C-18047-C E-3	B ACT	3 PGV	AOA	DE / O / O	FE–Q ST–Q FS–Q		FE–Q ST–Q (O) FS–Q (O)	
BV-210-08 INLET ISOLATION	N	C-18047-C B-3	B ACT	14 BFV	AOA	O / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-210-39 INLET ISOLATION	N	C-18047-C B-3	B ACT	12 BFV	AOA	O / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
CKV-210.1-34 PUMP DISCHARGE	3	C-18047-C F-2	C ACT	2.5 CHV	SEA	DE / OC / NA	FE–Q		FE–Q (F&R)	
CKV-210.1-35 PUMP DISCHARGE	3	C-18047-C F-2	C ACT	2.5 CHV	SEA	DE / OC / NA	FE–Q		FE–Q (F&R)	
PSV-210.1-87	3	C-18047-C E-1	C ACT	0.7 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 3
TCV-210.1-56	3	C-18047-C D-4	B ACT	2.5 TWV	MOA	DE / O / O	FE–Q ST–Q FS–Q		FE–Q ST–Q (O) FS–Q (O)	NOTE 2

NOTES FOR CONTROL ROOM CHILLED WATER & HVAC VALVE TABLE

1. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested per NMPC requirements.

2. The design of the valve is unique in that a motor is used to position and maintain the position of the valve. A loss of power to the valve causes the valve to open (i.e., pass untempered chill water to the control room HVAC system) due to spring action. The fail-safe mode of operation (closed to open) does not utilize the motor to achieve the fail-safe position (i.e., open). The spring (opening) function is similar to a typical spring (closure) fail-safe function of a pneumatically opened-spring closed valve. For fail-safe and stroke-time testing of this valve, this valve is considered a pneumatically opened-spring actuated fail-safe valve.

3. Pressure Relief valves in this section shall be tested within the subsequent ten years from the commencement of the 3rd Ten-Year Inservice Test Interval. A minimum of 20% of the valves of each type and manufacture within the same system shall be tested within any 48 months. This 20% shall be previously untested valves, if they exist.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTROL ROD DRIVE (CRD)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-44-*(106) CHARGING WATER	2	C-18016-C SH 1 C-3	C ACT	0.5 SCV	SEA	DE / C / NA	FE–Q	CRD-ROJ-3	FE–R (R)	NOTE 1 NOTE 2
CKV-44-*(108) SCRAM DISCHARGE	2	C-18016-C SH 1 A-3	C ACT	0.5 SCV	SEA	DE / O / NA	FE–Q	CRD-ROJ-4	FE–TS (F)	NOTE 1 NOTE 3
FCV-44-*(126) SCRAM INLET	1	C-18016-C SH 1 C-2	B ACT	0.75 GLV	AOA	C / O / O	FE–Q ST–Q FS–Q	CRD-ROJ-4	FE–TS ST–TS (O) FS–TS (O)	NOTE 1 NOTE 3
FCV-44-*(127) SCRAM OUTLET	1	C-18016-C SH 1 A-2	B ACT	0.75 GLV	AOA	C / O / O	FE–Q ST–Q FS–Q	CRD-ROJ-4	FE–TS ST–TS (O) FS–TS (O)	NOTE 1 NOTE 3
CKV-44-*(138) COOLING WATER INLET	1	C-18016-C SH 1 C-2	C ACT	0.5 CHV	SEA	DE / C / NA	FE–Q		FE–TS (R)	NOTE 1 NOTE 4
CKV-44.3-12 OUTBOARD IV X-174	1	C-18016-C SH 1 H-5	A/C ACT	3 CHV	SEA	DE / C / NA	FE–Q LJ	CRD-ROJ-1	FE–R (R) LJ–P	
CKV-44.3-13 INBOARD IV X-174	1	C-18016-C SH 1 H-5	A/C ACT	3 CHV	SEA	DE / C / NA	FE–Q LJ	CRD-ROJ-1	FE–R (R) LJ–P	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTROL ROD DRIVE (CRD)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-44.2-15 SDV VENT INBOARD IV	2	C-18016-C SH 2 A-3	A ACT	2 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	CRD-ROJ-2	FE–Q ST–R (C) FS–R (C) LJ–P PI–2Y	NOTE 5
IV-44.2-16 SDV VENT OUTBOARD IV	2	C-18016-C SH 2 A-5	A ACT	2 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	CRD-ROJ-2	FE–Q ST–R (C) FS–R (C) LJ–P PI–2Y	NOTE 5
IV-44.2-17 SDV DRAIN OUTBOARD IV	2	C-18016-C SH 2 E-5	A ACT	2 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	CRD-ROJ-2	FE–Q ST–R (C) FS–R (C) LJ–P PI–2Y	NOTE 5
IV-44.2-18 SDV DRAIN INBOARD IV	2	C-18016-C SH 2 F-5	A ACT	2 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	CRD-ROJ-2	FE–Q ST–R (C) FS–R (C) LJ–P PI–2Y	NOTE 5

NOTES FOR CONTROL ROD DRIVE VALVE TABLE

1. The MEL1 designator (*) is unique for each hydraulic control unit (HCU); only the typical of 129 HCUs is listed.

2. Scram accumulator pressure decay testing performed each refueling outage verifies closure. (GL 89-04 Position 7)

3. Control rod scram insertion time testing per TS 3.1.1 verifies valve proper operation and operability. (GL 89-04 Position 7)

4. Normal control rod motion verifies the valve moves to the closed position. Each partially or fully withdrawn control rod shall be exercised at least once each week (TS 3.1.1). For control rods that are in the safe position, the valve is not required to be exercised. (GL 89-04 Position 7)

5. Quarterly exercising (FE) of this valve is performed through the test solenoid (test path); refuel outage testing (exercising, stroke-time, and fail-safe) is conducted through the scram path.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRD-ROJ-1

System	:	CONTROL ROD DRIVE
Valve(s)	:	CKV-44.3-12, CKV-44.3-13
IST Category	:	A/C
ASME Class	:	1
Function	:	Containment Isolation
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves provide a flow path for CRD exhaust to the reactor vessel. During all modes of operation, the CRD pumps are normally is service, discharging water to the reactor vessel through these valves at a pressure greater than reactor pressure. Reverse flow closure for these valves must be performed from inside primary containment for access to test connections. Since the primary containment is inerted with nitrogen, access is not available on a quarterly or cold shutdown basis.
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Testing during cold shutdown would require deinerting the containment. Deinerting to perform inservice testing is not required. (NUREG. 1482, Section 3.1.1.3)
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) by the performance of 10CFR50 Appendix J leakage testing during refueling outages.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRD-ROJ-2

System	:	CONTROL ROD DRIVE
Valve(s)	:	IV-44.2-15, IV-44.2-16, IV-44.2-17, IV-44.2-18
IST Category	:	A
ASME Class	:	2
Function	:	Scram Discharge Volume Vent and Drain Isolation Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4; Fail-safe in accordance with OM-10, para. 4.2.1.6

Refueling Outage Test Justification :

The scram dump volume (SDV) containment isolation valves (IV-44.2-15, IV-44.2-16, IV-44.2-17, IV-44.2-18) are normally open valves. These valves close on the loss of air or the de-energization of the solenoid valves (SOV-113-275 and SOV-113-276 for IV-44.2-16 and IV-44.2-17; and . SOV-113-273 and SOV-113-274 for IV-44.2-15 and IV-44.2-18). The SDV air header and valve arrangement are single failure proof.

The solenoid valves are powered from either reactor trip bus (RTB) 131 or 141 through fuses. Removing the fuses to fail-safe test these valves causes a scram in approximately six seconds due to the de-energizing of SOV-113-271 and SOV-113-272. Fail-safe testing is not practical during power operation.

The safety-related exhaust path (scram path) is through SOV-113-275 and SOV-113-276 or SOV-113-273 and SOV-113-274 exhaust ports.

A test solenoid valve (SOV-113-277) was installed as a result of IE Bulletin 80-17 dated July 3, 1980, to permit fail-safe and stroke-time testing without causing a scram. The test solenoid exhaust path (test path) adds a restriction that is not present in the scram path. When the test solenoid is energized, the SDV air header and valve actuators are vented through SOV-113-277. The restriction is due to exhausting air through the SOV-113-274 and SOV-113-276 air inlet supply port, since the solenoids are energized. The solenoid valve employs an internal pilot in the inlet port. Air can exhaust through the inlet port; however, the flow path is not a fixed resistance path. The variable resistance can and

does cause variations in the stroke-time measurements of the valves.

The test path is not the safety-related exhaust path (scram path) for the containment isolation valves. Stroke-time testing during power operation is not practical through the test path. Fail-safe testing is also not practical since the scram path is not being tested.

Venting the scram air header due to exercising of the valves by pulling fuses subjects the control rod drives to higher differential pressures than observed during a scram at normal operating conditions. The high differential pressure applied to control rods fully inserted has resulted in equipment damage. Stroke-time and fail-safe testing through the scram path is impractical during cold shutdown. During the 2nd ten-year interval, this justification was approved as a relief request by the Safety Evaluation of March 7, 1991 (TAC NO. 60450). (GL 89-04 Position 7)

Quarterly Partial Stroke Testing : These valves will be exercised (FE) quarterly using the test solenoids.

Cold Shutdown Testing : These valves will be exercised (FE) during cold-shutdowns using the test solenoids.

Refueling Outage Testing : These valves will be exercised (FE), stroke-timed (ST), and fail-safe tested (FS) through the scram path during refueling outages.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRD-ROJ-3

System	:	CONTROL ROD DRIVE
Valve(s)	:	CKV-44-*(106)
IST Category	:	C
ASME Class	:	2
Function	:	Charging Water Check
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	Full-stroke reverse exercising cannot be performed during plant operation, since the CRD pump must be turned off to perform the test. The consequences of turning off the CRD pump during power operation (loss of CRD cooling water, CRD overheating, etc.) are unacceptable.
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Cold shutdown testing of HCU valves is impractical since the CRD pump is needed to provide recirculation pump seal water during cold shutdown.
Refueling Outage Testing	:	The charging water check valves will be tested each refueling outage by performing a scram accumulator pressure decay test. This is consistent with GL 89-04, Position 7.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRD-ROJ-4

System	:	CONTROL ROD DRIVE
Valve(s)	:	CKV-44-*(108) FCV-44-*(126) FCV-44-*(127)
IST Category	:	C B
ASME Class	:	1
Function	:	CKV-44-*(108) - Scram Discharge Check FCV-44-*(126) - Scram Inlet Valve FCV-44-*(127) - Scram Outlet Valve
Quarterly Test Requirements	:	C: Exercise in accordance with OM–10, para. 4.3.2 B: Exercise in accordance with OM–10, para. 4.2.1; B: Stroke Time in accordance with OM-10, para. 4.2.1.4; B: Fail-safe in accordance with OM-10, para. 4.2.1.6
Refueling Outage Test Justification	:	Exercising these valves scrams the associated control rod. Scramming individual control rods at power may produce unacceptable peaking factors in the core.
Quarterly Partial Stroke Testing	:	These valves cannot be partial-stroke tested. Removing the air from the actuator causes the valve to go fully open.
Cold Shutdown Testing	:	Testing at a frequency greater than that specified in Technical Specifications accelerates the wear on the CRD mechanisms with no commensurate improvement in safety.
Refueling Outage Testing	:	These valves will be tested in conjunction with the control rod scram insertion time testing specified in TS 3.1.1. Acceptability of the valve stroke times and exercises will be shown by the respective CRD meeting its required stroke time. This is consistent with GL 89-04, Position 7.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-40-03 OUTBOARD IV PIV	1	C-18007-C SH 1 G-3	A/C ACT	12 CHV	SEA	DE / OC / NA	FE–Q LK–2Y	CRS-ROJ-1	PE–Q (F) FE–Q(R) FE–R (F) LK–TS	NOTE 3
CKV-40-13 OUTBOARD IV PIV	1	C-18007-C SH 1 B-3	A/C ACT	12 CHV	SEA	DE / OC / NA	FE–Q LK–2Y	CRS-ROJ-1	PE–Q (F) FE–Q (R) FE–R (F) LK–TS	NOTE 3
CKV-40-20 KEEPFILL OUTBOARD IV PIV	2	C-18007-C SH 1 B-2	A/C ACT	2 CHV	SEA	DE / C / NA	FE–Q LK–2Y	CRS-ROJ-2	FE–R (R) LK–TS	NOTE 3
CKV-40-21 KEEPFILL INBOARD IV PIV	1	C-18007-C SH 1 B-3	A/C ACT	2 CHV	SEA	DE / C / NA	FE–Q LK–2Y		FE–Q (R) LK–TS	NOTE 3
CKV-40-22 KEEPFILL INBOARD IV PIV	1	C-18007-C SH 1 G-3	A/C ACT	2 CHV	SEA	DE / C / NA	FE–Q LK–2Y		FE–Q (R) LK–TS	NOTE 3
CKV-40-23 KEEPFILL OUTBOARD IV PIV	2	C-18007-C SH 1 G-2	A/C ACT	2 CHV	SEA	DE / C / NA	FE–Q LK–2Y	CRS-ROJ-2	FE–R (R) LK–TS	NOTE 3
CKV-81-07 PUMP DISCHARGE	2	C-18007-C SH 1 H-4	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CRS-ROJ-3	PE–Q (F) FE–Q (R) FE–R (F)	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-81-08 PUMP DISCHARGE	2	C-18007-C SH 1 H-4	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CRS-ROJ-3	PE–Q (F) FE–Q (R) FE–R (F)	
CKV-81-169 VACUUM BREAKER	2	C-18007-C SH 1 G-3	C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q	CRS-VR-1	DI–R-S (R)	
CKV-81-170 VACUUM BREAKER	2	C-18007-C SH 1 B-4	C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q	CRS-VR-1	DI–R-S (R)	
CKV-81-183	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-184	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-185	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-186	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-187	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-81-188	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-189	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-190	2	C-18007-C SH 1 H-1	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	NOTE 2
CKV-81-27 PUMP DISCHARGE	2	C-18007-C SH 1 A-4	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CRS-ROJ-3	PE–Q (F) FE–Q (R) FE–R (F)	
CKV-81-28 PUMP DISCHARGE	2	C-18007-C SH 1 A-4	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CRS-ROJ-3	PE–Q (F) FE–Q (R) FE–R (F)	
IV-40-01 INBOARD IV	1	C-18007-C SH 1 E-3	A ACT	12 GTV	MOA	C / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (O&C) LK–2Y PI–2Y	
IV-40-02 OUTBOARD	1	C-18007-C SH 1 F-3	B ACT	12 GTV	MOA	O / O / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (O) PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-40-05 TEST LINE	1	C-18007-C SH 1 G-3	A ACT	6 GTV	MOA	C / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (O&C) LK–2Y PI–2Y	
IV-40-06 TEST LINE	1	C-18007-C SH 1 B-3	A ACT	6 GTV	MOA	C / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (O&C) LK–2Y PI–2Y	
IV-40-09 INBOARD IV	1	C-18007-C SH 1 E-3	A ACT	12 GTV	MOA	C / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (O&C) LK–2Y PI–2Y	
IV-40-10 INBOARD IV	1	C-18007-C SH 1 D-3	A ACT	12 GTV	MOA	C / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (O&C) LK–2Y PI–2Y	
IV-40-11 INBOARD IV	1	C-18007-C SH 1 D-3	A ACT	12 GTV	MOA	C / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (O&C) LK–2Y PI–2Y	
IV-40-12 OUTBOARD	1	C-18007-C SH 1 C-3	B ACT	12 GTV	MOA	O / O / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (O) PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-40-30 HI POINT VENT INBOARD IV	1	C-18007-C SH 1 D-2	A ACT	1 GTV	MOA	C / C / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-40-31 HI POINT VENT INBOARD IV	1	C-18007-C SH 1 E-2	A ACT	1 GTV	MOA	C / C / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-40-32 HI POINT VENT OUTBOARD IV	2	C-18007-C SH 1 C-2	A ACT	1 GLV	AOA	C / C / C	FE–Q ST–Q FS–Q LK–2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LK–2Y PI–2Y	
IV-40-33 HI POINT VENT OUTBOARD IV	2	C-18007-C SH 1 F-2	A ACT	1 GLV	AOA	C / C / C	FE–Q ST–Q FS–Q LK–2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LK–2Y PI–2Y	
IV-81-01 SUCTION IV	2	C-18007-C SH 1 F-4	A ACT	14 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-81-02 SUCTION IV	2	C-18007-C SH 1 F-4	A ACT	14 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-81-21 SUCTION IV	2	C-18007-C SH 1 C-4	A ACT	14 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-81-22 SUCTION IV	2	C-18007-C SH 1 C-4	A ACT	14 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
PRV-81-73 MOTOR COOLER	2	C-18007-C SH 1 B-4	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PRV-81-74 MOTOR COOLER	2	C-18007-C SH 1 B-5	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PRV-81-75 MOTOR COOLER	2	C-18007-C SH 1 G-4	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PRV-81-76 MOTOR COOLER	2	C-18007-C SH 1 G-5	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PRV-81-77 MOTOR COOLER	2	C-18007-C SH 1 H-2	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PRV-81-78 MOTOR COOLER	2	C-18007-C SH 1 H-2	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PRV-81-79 MOTOR COOLER	2	C-18007-C SH 1 H-2	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PRV-81-80 MOTOR COOLER	2	C-18007-C SH 1 H-2	C ACT	0.75 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PSV-81-241 MIN FLOW IV XS-335	2	C-18007-C SH 1 A-4	A/C ACT	2 REV	SEA	DE / OC / NA	RT–10Y-S LJ		RT–10Y-S LJ–P	NOTE 1
PSV-81-242 MIN FLOW IV XS-335	2	C-18007-C SH 1 B-4	A/C ACT	2 REV	SEA	DE / OC / NA	RT–10Y-S LJ		RT–10Y-S LJ–P	NOTE 1
PSV-81-243 MIN FLOW IV XS-334	2	C-18007-C SH 1 H-3	A/C ACT	2 REV	SEA	DE / OC / NA	RT–10Y-S LJ		RT–10Y-S LJ–P	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CORE SPRAY (CRS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-81-244 MIN FLOW IV XS-334	2	C-18007-C SH 1 H-3	A/C ACT	2 REV	SEA	DE / OC / NA	RT–10Y-S LJ		RT–10Y-S LJ–P	NOTE 1

NOTES FOR CORE SPRAY VALVE TABLE

1. Pressure Relief valves in this section shall be tested during the 3rd Ten-Year inservice test interval. A minimum of 20% of the valves of each type and manufacturer within the same system shall be tested within any 48 months. This 20% shall be previously untested valves, if they exist.

2. The valve is considered a "skid mounted" component and is tested by the proper operation of the associated pump during quarterly testing.

3. The valve is a Primary Coolant System Pressure Isolation Valve and is leak tested in accordance with Technical Specification 3/4.2.7.1. However, in no case shall testing exceed the Code required interval of 2 years..

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRS-ROJ-1

System	:	CORE SPRAY
Valve(s)	:	CKV-40-03, CKV-40-13
IST Category	:	A/C
ASME Class	:	1
Function	:	Core Spray Injection Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves have no provision for monitoring obturator position. During the pump quarterly testing, the test flow rate is limited to approximately 2900 gpm by the size of the test line. Required system flow rate is 3400 gpm. From manufacturer's published information, it has been determined that these valves should be fully opened at a flow rate of about 1600 gpm. During normal plant operation, reactor pressure precludes core spray injection to the reactor vessel. Additionally, the normal suction source for the core spray pumps is the torus. The cleanliness of this water precludes its use as a water source for routine injection into the core. Temporary piping alterations are required to supply a reactor grade water source for testing. Installation of this alteration on a routine basis is burdensome and costly, with no increase in plant safety. During the 2nd ten-year interval, this justification was approved as a relief request per the Safety evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	The valves will be partial exercised (PE) each quarter by obtaining the required test flow rate during the quarterly core spray pump test.
Cold Shutdown Testing	:	Full flow exercising is impractical during cold shutdowns due to the need to make temporary piping alterations to allow connection to the condensate storage tank.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during the design accident flow injection test each refueling outage.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRS-ROJ-2

System	:	CORE SPRAY
Valve(s)	:	CKV-40-20, CKV-40-23
IST Category	:	A/C
ASME Class	:	1
Function	:	Outboard Keep-Fill Pressure Isolation Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves are the outboard check valves in each set of two series check valve sets (one set for each loop). The inboard check valves are tested during the core spray pump quarterly testing. It is not practicable to exercise these outboard valves quarterly. Significant time is involved to setup test equipment to perform a reverse closure testing. The outboard check valves cannot be tested without bypassing the inboard check valve or without providing a separate pressure source. During the 2nd ten-year interval, this justification was approved as a relief request per the Safety Evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during the pressure isolation valve leakage testing performed during refueling outages.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CRS-ROJ-3

System	:	CORE SPRAY
Valve(s)	:	CKV-81-07, CKV-81-08, CKV-81-27, CKV-81-28
IST Category	:	C
ASME Class	:	1
Function	:	Topping Pump Discharge Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves have no provision for monitoring obturator position. During the pump quarterly testing, the test flow rate is limited to approximately 2900 gpm by the size of the test line. Required system flow rate is 3400 gpm. From manufacturer's published information, it has been determined that these valves should be fully opened at a flow rate of about 1600 gpm. During normal plant operation, reactor pressure precludes core spray injection to the reactor vessel. Additionally, the normal suction source for the core spray pumps is the torus. The cleanliness of this water precludes its use as a water source for routine injection into the core. Temporary piping alterations are required to supply a reactor grade water source for testing. Installation of this alteration on a routine basis is burdensome and costly, with no increase in plant safety. During the 2nd ten-year interval, this justification was approved as a relief request per the Safety evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	The valves will be partial exercised (PE) each quarter by obtaining the required test flow rate during the quarterly core spray pump test.
Cold Shutdown Testing	:	Full flow exercising is impractical during cold shutdowns due to the need to make temporary piping alterations to allow connection to the condensate storage tank.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE), verified by non-intrusive testing, each refueling outage.

NINE MILE POINT UNIT 1 IST PROGRAM
RELIEF REQUEST
CRS-VR-1

System	:	CORE SPRAY
Valve(s)	:	CKV-81-169, CKV-81-170
IST Category	:	C
ASME Class	:	2
Category	:	C
Function	:	Core Spray Header Vacuum Breaker Check Valves
Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Basis For Relief	:	These valves have no provision for monitoring obturator position. Additionally, the core spray header drain line connects directly with the torus atmosphere, so there are no connections available for valve testing. Due to the valve size (0.75"), quarterly pump testing does not positively verify valve degradation since the effect of the valve position on pump performance is not known. However, the quarterly pump testing does verify system performance and availability.
	:	Partial stroke in the reverse direction is not practical.
	:	The Code provides that, if disassembly and inspection is the only method available to verify the operation of a check valve, the disassembly and inspection may be performed on a refueling basis.
Proposed Alternate Testing	:	The opening and closing ability of these two check valves shall be verified individually for each valve by disassembly and inspection on an alternating basis during each refueling outage. The disassembly and inspection shall be performed in accordance with GL-89-04, Position 2.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONDENSATE TRANSFER (CT)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-50-52 DEMIN OUTLET	3	C-18003-C F-3	B ACT	6 GTV	MAA	O / C / NA			FE–R	NOTE 1 NOTE 2
BV-53-02 CST OUTLET	N	C-18003-C G-2	B ACT	4 GTV	MAA	O / C / NA			FE–R	NOTE 1 NOTE 2
BV-53-03 CST OUTLET	N	C-18003-C H-2	B ACT	4 GTV	MAA	O / C / NA			FE–R	NOTE 1 NOTE 2
BV-57.1-01 SFP SLUDGE	3	C-18048-C E-6	B PASS	1.5 GLV	AOA	C / C / C			PI–2Y	NOTE 1
BV-57.1-03 CU SLUDGE	3	C-18048-C E-6	B PASS	1.5 GLV	AOA	C / C / C			PI–2Y	NOTE 1
BV-57-103 CU DEMIN FLUSH	3	C-18035-C A-2	B ACT	2 BLV	AOA (MAA)	O / C / NA			FE–R ST–R (C)	NOTE 1 NOTE 2
BV-57-104 CU DEMIN FLUSH	3	C-18035-C C-2	B ACT	2 BLV	AOA (MAA)	O / C / NA			FE–R ST–R (C)	NOTE 1 NOTE 2
BV-57-207 CU DEMIN FILL	3	C-18035-C C-4	B ACT	2 DIV	AOA (MAA)	O / C / NA			FE–R ST–R (C)	NOTE 1 NOTE 2
BV-57-209 COND DEMIN FILL	3	C-18035-C C-4	B ACT	2 DIV	AOA (MAA)	O / C / NA			FE–R ST–R (C)	NOTE 1 NOTE 2
BV-57-26 SFPC FILTER	3	C-18008-C E-3	B PASS	3 BFV	AOA	C / C / C			PI–2Y	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONDENSATE TRANSFER (CT)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-57-27 SFPC FILTER	3	C-18008-C E-5	B PASS	3 BFV	AOA	C / C / C			PI–2Y	NOTE 1
BV-59-03 COND MAKE-UP	3	C-18003-C F-2	B ACT	12 GTV	MAA	O / C / NA			FE–R	NOTE 1 NOTE 2
BV-59-05 COND MAKE-UP	3	C-18003-C F-2	B ACT	8 PGV	MAA	O / C / NA			FE–R	NOTE 1 NOTE 2
CKV-57-03 SFP MAKE-UP	N	C-18008-C C-2	C ACT	3 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
CKV-57-13 PUMP DISCHARGE	3	C-18048-C E-5	C ACT	4 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1
CKV-57-136 MIN FLOW	3	C-18048-C F-5	C ACT	0.75 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
CKV-57-14 PUMP DISCHARGE	3	C-18048-C F-5	C ACT	4 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1
CKV-57-142 MIN FLOW	3	C-18048-C F-5	C ACT	0.75 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
IV-57-176 INST FILL	3	C-18008-C E-1	B ACT	1 GTV	MAA	O / C / NA			FE–R	NOTE 1
LCV-57-25 SFP MAKE-UP	3	C-18008-C C-2	B ACT	3 DIV	AOA	DE / O / O			FE–Q ST–Q (O) FS–Q (O)	NOTE 1

SYSTEM: CONDENSATE TRANSFER (CT)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
LCV-57-58 SFP SURGE TANK MAKE-UP	3	C-18008-C D-2	B ACT	3 GLV	AOA	DE / O / O			FE–Q ST–Q (O) FS–Q (O)	NOTE 1
VLV-57-41	3	C-18048-C F-4	B ACT	4 GTV	MAA	O / C / NA			FE–R	NOTE 1

NOTES FOR CONDENSATE TRANSFER VALVE TABLE

1. This augmented component is voluntarily included, based on its relative importance to nuclear safety and tested as per NMPC requirements.

2. This valve is either a normally open manual valve or an automatic valve with an unqualified actuator which serves as the boundary between the safety-related and non-safety-related piping. (See Reference 26) For those valves with an unqualified actuator, exercising with the actuator is acceptable since valves are included in the Program on an augmented basis.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-201.2-02 DW N_2 SUPPLY	3	C-18014-C SH 1 F-3	B ACT	1 GLV	AOA	C / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-201.2-04 TORUS N_2 SUPPLY	3	C-18014-C SH 1 F-4	B ACT	1 GLV	AOA	C / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-201.2-05 TORUS N_2 PUMP BACK	3	C-18014-C SH 1 F-4	B PASS	3 PGV	AOA	C / C / C			PI–2Y	NOTE 1
BV-201.2-08 DW N_2 PUMP BACK	3	C-18014-C SH 1 F-3	B PASS	3 PGV	AOA	C / C / C			PI–2Y	NOTE 1
BV-201.2-136 PUMP BACK VENT	3	C-18014-C SH 1 H-3	B PASS	3 PGV	AOA	C / C / C			PI–2Y	NOTE 1
BV-201.8-03 VAPORIZER INLET	3	C-18014-C SH 4 B-2	B PASS	1.5 BLV	AOA	C / C / C			PI–2Y	NOTE 1
BV-201.8-04 VAPORIZER INLET	3	C-18014-C SH 4 D-2	B ACT	1 GTV	AOA	C / O / O			FE–Q ST–Q (O) FS–Q (O) PI–2Y	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-201.9-19 VAPORIZER INLET	3	C-18014-C SH 3 E-3	B ACT	1 GTV	AOA	C / O / O			FE–Q ST–Q (O) FS–Q (O) PI–2Y	NOTE 1
BV-201.9-46 DW N_2 SUPPLY	3	C-18014-C SH 1 E-3	B ACT	1.5 GTV	AOA	C / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-201.9-47 TORUS N_2 SUPPLY	3	C-18014-C SH 1 F-4	B ACT	1.5 GTV	AOA	C / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-201-18 RBEVS BV	N	C-18014-C SH 1 H-2	B PASS	12 BFV	AOA	C / C / C			PI–2Y	NOTE 1
CKV-201.9-94 CAD N_2 SUPPLY	3	C-18014-C SH 3 F-5	C ACT	1 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
DISK-201.8-97	3	C-18014-C SH 4 C-2	C ACT	1 RPD	SEA	C / OC / NA			RD–5Y	NOTE 1
FCV-201.8-02 FILL & CAD N_2 SUPPLY	3	C-18014-C SH 4 F-5	B ACT	1 GLV	AOA	DE / O / O			FE–Q ST–Q (O) FS–Q (O)	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
FCV-201.9-49 FILL & CAD N_2 SUPPLY	3	C-18014-C SH 3 G-3	B ACT	1 GLV	AOA	DE / O / O			FE–Q ST–Q (O) FS–Q (O)	NOTE 1
IV-201.1-09 POST LOCA VENT INBOARD IV	2	C-18014-C SH 1 F-2	A ACT	1 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.1-11 POST LOCA VENT OUTBOARD IV X-19	2	C-18014-C SH 1 F-2	A ACT	1 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.1-14 POST LOCA VENT INBOARD IV X-19	2	C-18014-C SH 1 D-2	A ACT	1 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.1-16 POST LOCA VENT OUTBOARD IV X-59	2	C-18014-C SH 1 C-2	A ACT	1 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	NOTE 2

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-201.2-03 DW N_2 FILL & BLEED OUTBOARD IV X-19	2	C-18014-C SH 1 F-2	A ACT	4 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	
IV-201.2-06 TORUS N_2 FILL & BLEED OUTBOARD IV XS-327	2	C-18014-C SH 1 F-4	A ACT	3 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	
IV-201.2-32 DW N_2 FILL & BLEED INBOARD IV X-19	2	C-18014-C SH 1 F-2	A ACT	4 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	
IV-201.2-33 TORUS N_2 FILL & BLEED INBOARD IV XS-327	2	C-18014-C SH 1 F-5	A ACT	3 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) LJ–P PI–2Y	
IV-201-07 TORUS V&P OUTBOARD IV XS-340	2	C-18014-C SH 1 A-6	A ACT	20 BFV	MOA	C / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-201-08 TORUS V&P INBOARD IV XS-340	2	C-18014-C SH 1 B-6	A ACT	20 BFV	AOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
IV-201-09 DW V&P OUTBOARD IV X-18	2	C-18014-C SH 1 B-5	A ACT	24 BFV	MOA	C / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-201-10 DW V&P INBOARD IV X-18	2	C-18014-C SH 1 B-5	A ACT	24 BFV	AOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
IV-201-16 TORUS V&P INBOARD IV XS-327	2	C-18014-C SH 1 G-5	A ACT	20 BFV	AOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
IV-201-17 TORUS V&P OUTBOARD IV XS-327	2	C-18014-C SH 1 H-5	A ACT	20 BFV	MOA	C / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-201-31 DW V&P OUTBOARD IV X-19	2	C-18014-C SH 1 F-2	A ACT	24 BFV	MOA	C / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-201-32 DW V&P INBOARD IV X-19	2	C-18014-C SH 1 F-2	A ACT	24 BFV	AOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
PSV-201.8-10	3	C-18014-C SH 4 D-2	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-105	3	C-18014-C SH 4 B-4	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-109	3	C-18014-C SH 4 C-4	C ACT	0.25 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-11	3	C-18014-C SH 4 D-3	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-12	3	C-18014-C SH 4 D-4	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-201.8-13	3	C-18014-C SH 4 F-4	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-14	3	C-18014-C SH 4 G-4	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-39	3	C-18014-C SH 4 C-3	C ACT	0.25 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.8-96	3	C-18014-C SH 4 B-2	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-10	3	C-18014-C SH 3 D-2	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-11	3	C-18014-C SH 3 C-2	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-14	3	C-18014-C SH 3 D-2	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-17	3	C-18014-C SH 3 D-3	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT VENT AND PURGE (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-201.9-24	3	C-18014-C SH 3 F-3	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-25	3	C-18014-C SH 3 E-3	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-33	3	C-18014-C SH 3 E-4	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-40	3	C-18014-C SH 3 C-4	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-69	3	C-18014-C SH 3 G-3	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3
PSV-201.9-70	3	C-18014-C SH 3 G-2	C ACT	1 REV	SEA	C / OC / NA			RT–10Y-S	NOTE 1 NOTE 3

NOTES FOR COMBUSTIBLE GAS CONTROL VALVE TABLE

1. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested as per NMPC requirements.

2. These valves are grouped (IV-201.1-09 & IV-201.1-11) and (IV-201.1-14 & IV-201.1-16). Each valve has two separate supply solenoids. Each group is manually controlled by one switch.

3. Pressure relief valves in this section shall be tested within the subsequent ten years from the commencement of the 3rd Ten-Year Inservice Test Interval.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: H_2O_2 MONITORING (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST-FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST-FREQ (DIR)	REMARKS
CKV-201.2-67 H_2-O_2 RETURN INBOARD IV X-40	2	C-18014-C SH 2 E-5	A/C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q LJ		FE–Q (R) LJ–P	
CKV-201.2-68 H_2-O_2 RETURN OUTBOARD IV X-40	2	C-18014-C SH 2 F-5	A/C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q LJ		FE–Q (R) LJ–P	
CKV-201.2-70 H_2-O_2 RETURN INBOARD IV XS-321	2	C-18014-C SH 2 F-5	A/C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q LJ		FE–Q (R) LJ–P	
CKV-201.2-71 H_2-O_2 RETURN INBOARD IV XS-321	2	C-18014-C SH 2 F-5	A/C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q LJ		FE–Q (R) LJ–P	
IV-201.2-109 H_2-O_2 #11 TORUS RETURN INBOARD IV XS-328	2	C-18014-C SH 2 B-5	A ACT	0.75 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2

SYSTEM: H_2O_2 MONITORING (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-201.2-110 H_2-O_2 #11 TORUS SAMPLE INBOARD IV XS-328	2	C-18014-C SH 2 C-4	A ACT	0.75 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.2-111 H_2-O_2 #11 TORUS SAMPLE OUTBOARD IV XS-328	2	C-18014-C SH 2 C-5	A ACT	0.75 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.2-112 H_2-O_2 #11 TORUS RETURN OUTBOARD IV XS-328	2	C-18014-C SH 2 B-5	A ACT	0.75 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.2-23 H_2-O_2 #12 TORUS SAMPLE INBOARD IV XS-321	2	C-18014-C SH 2 E-5	A ACT	0.5 GLV	SOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 1
IV-201.2-24 H_2-O_2 #12 TORUS SAMPLE OUTBOARD IV XS-321	2	C-18014-C SH 2 E-5	A ACT	0.5 GLV	SOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: H_2O_2 MONITORING (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-201.2-29 H_2-O_2 #12 DW SAMPLE INBOARD IV X-49	2	C-18014-C SH 2 E-3	A ACT	0.5 GLV	SOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 1
IV-201.2-30 H_2-O_2 #12 DW SAMPLE OUTBOARD IV X-49	2	C-18014-C SH 2 E-3	A ACT	0.5 GLV	SOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 1
IV-201.7-01 H_2-O_2 #11 SAMPLE STREAM B INBOARD IV X-64	2	C-18014-C SH 2 C-2	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.7-02 H_2-O_2 #11 SAMPLE STREAM B OUTBOARD IV X-64	2	C-18014-C SH 2 C-2	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.7-08 DW CAM SAMPLE INBOARD IV X-134	2	C-18014-C SH 2 E-2	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2

SYSTEM: H_2O_2 MONITORING (CTN)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-201.7-09 DW CAM SAMPLE OUTBOARD IV .X-134	2	C-18014-C SH 2 E-2	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.7-10 H_2-O_2 #11 DW RETURN INBOARD IV X-20	2	C-18014-C SH 2 E-3	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2
IV-201.7-11 H_2-O_2 #11 DW RETURN OUTBOARD IV X-20	2	C-18014-C SH 2 E-3	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	GEN-VR-1	FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	NOTE 2

NOTES FOR H2-O2 MONITORING VALVE TABLE

1. These valves are grouped (IV-201.2-23, IV-201.2-24, IV-201.2-29 & IV-201.2-30) and the group is controlled by one switch.

2. These valves are grouped (IV-201.2-109, IV-201.2-112, IV-201.2-110, IV-201.2-111, IV 201.7-02, & IV-201.7-03) and (IV 201.7-08, IV-201.7-09, IV-201.7-10, & IV-201.7-11) and each group is controlled by one switch.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-80-40 INTER-TIE	2	C-18012-C SH 2 B-2	B ACT	6 GTV	AOA	O / OC / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	
BV-80-41 INTER-TIE	2	C-18012-C SH 2 B-1	B ACT	6 GTV	AOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	
BV-80-44 INTER-TIE	2	C-18012-C SH 2 G-2	B ACT	6 GTV	AOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	
BV-80-45 INTER-TIE	2	C-18012-C SH 2 G-1	B ACT	6 GTV	AOA	O / OC / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	
BV-93-25 DISCHARGE BV	3	C-18012-C SH 1 C-3	B PASS	12 GTV	MOA	O / O / AI	PI–2Y		PI–2Y	
BV-93-26 DISCHARGE BV	3	C-18012-C SH 1 B-3	B PASS	12 GTV	MOA	O / O / AI	PI–2Y		PI–2Y	
BV-93-27 DISCHARGE BV	3	C-18012-C SH 1 F-3	B PASS	12 GTV	MOA	O / O / AI	PI–2Y		PI–2Y	

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-93-28 DISCHARGE BV	3	C-18012-C SH 1 D-3	B PASS	12 GTV	MOA	O / O / AI	PI–2Y		PI–2Y	
CKV-80-05 PUMP DISCHARGE	2	C-18012-C SH 2 A-6	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-ROJ-1	PE–Q (F) FE–Q (R) FE–R (F)	
CKV-80-06 PUMP DISCHARGE	2	C-18012-C SH 2 B-5	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-ROJ-1	PE–Q (F) FE–Q (R) FE–R (F)	
CKV-80-17 DW INLET INBOARD IV	2	C-18012-C SH 2 D-2	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	PE–R (F) DI–R-S (F&R)	NOTE 3
CKV-80-18 DW INLET INBOARD IV	2	C-18012-C SH 2 D-3	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	PE–R (F) DI–R-S (F&R)	NOTE 3
CKV-80-19 TORUS INLET INBOARD IV	2	C-18012-C SH 2 F-3	C ACT	3 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	DI–R-S (F&R)	NOTE 3
CKV-80-25 PUMP DISCHARGE	2	C-18012-C SH 2 H-6	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-ROJ-1	PE–Q (F) FE–Q (R) FE–R (F)	
CKV-80-26 PUMP DISCHARGE	2	C-18012-C SH 2 G-5	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-ROJ-1	PE–Q (F) FE–Q (R) FE–R (F)	

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-80-37 DW INLET INBOARD IV	2	C-18012-C SH 2 E-2	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	PE–R (F) DI–R-S (F&R)	NOTE 3
CKV-80-38 DW INLET INBOARD IV	2	C-18012-C SH 2 E-3	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	PE–R (F) DI–R-S (F&R)	NOTE 3
CKV-80-39 TORUS INLET INBOARD IV	2	C-18012-C SH 2 C-3	C ACT	3 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	DI–R-S (F&R)	NOTE 3
CKV-80-65 TORUS INLET INBOARD IV	2	C-18012-C SH 2 D-3	C ACT	3 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	PE–R (F) DI–R-S (F&R)	NOTE 3
CKV-80-66 TORUS INLET OUTBOARD IV	2	C-18012-C SH 2 C-2	C ACT	3 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	DI–R-S (F&R)	NOTE 3
CKV-80-67 TORUS INLET INBOARD IV	2	C-18012-C SH 2 E-3	C ACT	3 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	PE–R (F) DI–R-S (F&R)	NOTE 3
CKV-80-68 TORUS INLET OUTBOARD IV	2	C-18012-C SH 2 F-2	C ACT	3 CHV	SEA	DE / OC / NA	FE–Q	CTN-SP-VR-1	DI–R-S (F&R)	NOTE 3
CKV-93-09 PUMP DISCHARGE	3	C-18012-C SH 1 A-4	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-93-10 PUMP DISCHARGE	3	C-18012-C SH 1 B-4	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-93-11 PUMP DISCHARGE	3	C-18012-C SH 1 G-4	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-93-12 PUMP DISCHARGE	3	C-18012-C SH 1 E-4	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-93-57 PUMP DISCHARGE	3	C-18012-C SH 1 B-3	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-93-59 PUMP DISCHARGE	3	C-18012-C SH 1 E-3	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-93-61 PUMP DISCHARGE	3	C-18012-C SH 1 A-3	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-93-63 PUMP DISCHARGE	3	C-18012-C SH 1 F-3	C ACT	12 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
FCV-80-118 TEST LINE	2	C-18012-C SH 2 F-4	B ACT	6 GLV	MOA	C / OC / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (O&C) PI–2Y	NOTE 3

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
FCV-93-71 RAW INTER-TIE	2	C-18012-C SH 1 C-1	B PASS	12 PGV	MOA	C / C / AI	PI–2Y		PI–2Y	
FCV-93-72 RAW INTER-TIE	2	C-18012-C SH 1 E-2	B PASS	12 PGV	MOA	C / C / AI	PI–2Y		PI–2Y	
FCV-93-73 RAW INTER-TIE	2	C-18012-C SH 1 A-2	B PASS	12 PGV	MOA	C / C / AI	PI–2Y		PI–2Y	
FCV-93-74 RAW INTER-TIE	2	C-18012-C SH 1 F-1	B PASS	12 PGV	MOA	C / C / AI	PI–2Y		PI–2Y	
IV-80-01 SUCTION IV	2	C-18012-C SH 2 C-5	A ACT	12 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-80-02 SUCTION IV	2	C-18012-C SH 2 D-6	A ACT	12 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-80-114 RW DISCHARGE	2	C-18012-C SH 2 H-2	B ACT	4 PGV	MOA	C / C / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (C) PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-80-115 RW DISCHARGE	2	C-18012-C SH 2 H-2	B ACT	4 PGV	MOA	C / C / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (C) PI–2Y	
IV-80-15 INLET OUTBOARD IV	2	C-18012-C SH 2 C-2	B ACT	12 GTV	AOA	O / OC / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 2 NOTE 3
IV-80-16 INLET OUTBOARD IV	2	C-18012-C SH 2 C-3	B ACT	12 GTV	AOA	O / OC / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 2 NOTE 3
IV-80-21 SUCTION IV	2	C-18012-C SH 2 F-5	A ACT	12 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-80-22 SUCTION IV	2	C-18012-C SH 2 E-6	A ACT	12 GTV	MOA	O / OC / AI	FE–Q ST–Q LK–2Y PI–2Y		FE–Q ST–Q (C) LK–2Y PI–2Y	
IV-80-35 INLET OUTBOARD IV	2	C-18012-C SH 2 F-2	B ACT	12 GTV	AOA	O / OC / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 2 NOTE 3

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CONTAINMENT SPRAY (CTN-SP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-80-36 INLET OUTBOARD IV	2	C-18012-C SH 2 F-3	B ACT	12 GTV	AOA	O / OC / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 2 NOTE 3
PSV-80-102A PUMP COOLER	2	C-18012-C SH 1 H-3	C ACT	0.5 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PSV-80-102B PUMP COOLER	2	C-18012-C SH 1 H-3	C ACT	0.5 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PSV-80-102C PUMP COOLER	2	C-18012-C SH 1 H-3	C ACT	0.5 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PSV-80-102D PUMP COOLER	2	C-18012-C SH 1 H-3	C ACT	0.5 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1

NOTES FOR CONTAINMENT SPRAY VALVE TABLE

1. Pressure Relief valves in this section shall be tested during the 3rd Ten-Year Inservice Test Interval. A minimum of 20% of the valves of each type and manufacturer within the same system shall be tested within any 48 months. This 20% shall be previously untested valves, if they exist.

2. This valve fails open on loss of electrical power but fails as-is on loss of air. The valve is Fail-Safe tested by removing electric power to the solenoid. Loss of air Fail-Safe testing is not required since the instrument air supply to the valve is Safety-Related.

3. This valve is provided with a qualified seal water system in accordance with 10CFR50 Appendix J for all post-accident conditions. Therefore, this valve does not require a 10CFR50 Appendix J Type C air/nitrogen test.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CTN-SP-ROJ-1

System	:	CONTAINMENT SPRAY
Valve(s)	:	CKV-80-05, CKV-80-06, CKV-80-25, CKV-80-26
IST Category	:	C
ASME Class	:	2
Function	:	Containment Spray Pump Discharge Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves have no provision for monitoring obturator position. During the pump quarterly testing, the test flow rate is limited to approximately 2900 gpm by the size of the test line. Required system flow rate is 3000 gpm. From manufacturer's published information, it has been determined that these valves should be fully opened at a flow rate of about 2200 gpm. Full-stroke exercising of these valves requires spraying torus water into primary containment. During any mode, spray-down of the primary containment is undesirable and would result in costly and burdensome cleanup and cause equipment damage. During the 2nd ten-year interval, this justification was approved as a relief request per the Safety evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	The valves will be partial exercised (PE) each quarter by obtaining the required test flow rate during the quarterly core spray pump.
Cold Shutdown Testing	:	Full flow exercising is impractical during cold shutdowns. Full flow testing would result in the spray-down of the primary containment with torus water.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE), verified by non-intrusive testing, each refueling outage.

NINE MILE POINT UNIT 1 IST PROGRAM
RELIEF REQUEST
CTN-SP-VR-1

System	:	CONTAINMENT SPRAY
Valve(s)	:	CKV-80-17, CKV-80-18, CKV-80-19, CKV-80-37, CKV-80-38, CKV-80-39, CKV-80-65, CKV-80-66, CKV-80-67, CKV-80-68
IST Category	:	C
ASME Class	:	2
Category	:	C
Function	:	Containment Spray Check Valves
Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Basis For Relief	:	These valves have no provisions for determining obturator position. Full stroke exercising of these valves, using system pumps, requires spraying torus water into the primary containment. During any mode, spray-down of the primary containment is undesirable and would result in costly and burdensome cleanup and cause equipment damage. During the 2nd ten-year interval, this justification was approved as a relief request per the Safety evaluation of March 7, 1991 (TAC NO. 60450).
	:	Partial stroke exercising is not practical due to system configuration.
	:	Full stroke exercising is impractical during cold shutdowns. Full stroke testing would result in the spray-down of the primary containment with torus water. Partial-stroke exercising with air requires entry into primary containment, which is inerted with nitrogen. Deinerting to perform inservice testing is not required. (NUREG. 1482, Section 3.1.1.3)

Proposed Alternate Testing : Valves CKV-80-17, CKV-80-18, CKV-80-37, CKV-80-38, CKV-80-65 and CKV-80-67 will be part-stroke exercised (PE) with compressed air during refueling outages.

System configuration prevents detection of sufficient flow through valves CKV-80-19, CKV-80-39, CKV-80-66 and CKV-80-68 to credit partial stroke when using air (e.g. most flow goes to the drywell, making detection in the torus very difficult).

Due to limited access to the torus, the partial exercise of check valves CKV-80-65 and CKV-80-67 will be coordinated with the nozzle air flow test and will be done on an alternating outage schedule (e.g., flow through CKV-80-65 for the nozzle test will be performed at one refueling outage, and flow through CKV-80-67 will be performed the following outage.

The valves will be disassembled and inspected at a nominal frequency of six years (every third refueling outage) to satisfy OM-10 Section 4.3.2 exercising requirements. At least one valve from each group (CKV-80-17, CKV-80-18, CKV-80-37, CKV-80-38; and CKV-80-19, CKV-80-39, CKV-80-66, CKV-80-68; and CKV-80-65, CKV-80-67) will be examined during refueling outages. (Generic Letter 89-04, Position 2)

- The examination shall consist of gaining access to the valve internals (e.g., by removing an inspection port or a spool piece, by breaking body flange and cold springing the line, or by bonnet (cover) removal, etc.). The obturator will then be manually exercised (e.g., by hand, or by using a rod that is inserted through the access opening, etc.).

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: CLEANUP (CU)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-37-08R RX DRAIN	1	C-18009-C SH 1 B-2	B PASS	2 GLV	MOA	C / C / AI	PI–2Y		PI–2Y	
BV-37-09R RX DRAIN	1	C-18009-C SH 1 B-2	B PASS	2 GLV	MOA	C / C / AI	PI–2Y		PI–2Y	
CKV-33-03 RETURN OUTBOARD IV X-154	1	C-18009-C SH 1 C-1	A/C ACT	6 CKV	SEA	DE / C / NA	FE–Q LJ	CU-ROJ-1	FE–R (R) LJ–P	
IV-33-01R RETURN INBOARD IV X-154	1	C-18009-C SH 1 C-1	A ACT	6 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-33-02R SUPPLY INBOARD IV X-9	1	C-18009-C SH 1 A-2	A ACT	6 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-33-04 SUPPLY OUTBOARD IV X-9	1	C-18009-C SH 1 A-2	A ACT	6 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
CU-ROJ-1

System	:	CLEAN-UP
Valve(s)	:	CKV-33-03
IST Category	:	A/C
ASME Class	:	1
Function	:	Clean-up Containment Isolation Valve
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	The check valve is on the cleanup return to the reactor and is located in a high radiation area (100-500 mR/hr general area). Exercising the check valve during normal operation or cold shutdown conditions imposes undue risk to plant operations personnel since the fluid medium is high pressure (normally greater than 800 psig), high temperature (approximately 200°F to 300°F), and contaminated reactor coolant; requires system intrusion thereby breaching the reactor coolant pressure boundary; and violates containment integrity if an external source of water is utilized. There is no provision for position indication of the obturator.
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) by the 10CFR50 Appendix J testing performed during refueling outages.

THIRD TEN YEAR INTERVAL— VALVES
NINE MILE POINT NUCLEAR POWER STATION— UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: EMERGENCY DIESEL GENERATOR AUXILIARIES (DG)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-96-107 DG 103 AIR START RELAY	N	C-18026-C SH 2 F-3	B ACT	1.5 GTV	AOA	C / O / C			FE–Q ST–Q (O)	NOTE 1 NOTE 2
BV-96-85 DG 102 AIR START RELAY	N	C-18026-C SH 1 F-3	B ACT	1.5 GTV	AOA	C / O / C			FE–Q ST–Q (O)	NOTE 1 NOTE 2
CKV-79.1-19 DG 102 L.O. COOLER DISCHARGE	N	C-18026-C SH 1 E-4	C ACT	0.75 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-79.1-38 DG 103 L.O. COOLER DISCHARGE	N	C-18026-C SH 2 E-4	C ACT	0.75 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-79-59 DG 102 COOLING WATER PUMP DISCHARGE	3	C-18026-C SH 1 B-5	C ACT	4 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-79-60 DG 103 COOLING WATER PUMP DISCHARGE	3	C-18026-C SH 2 B-5	C ACT	4 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-82-64 DG 103 FUEL STORAGE TANK VENT	N	C-18026-C SH 2 B-3	C ACT	0.75 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2

SYSTEM: EMERGENCY DIESEL GENERATOR AUXILIARIES (DG)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-82-73 DG 102 FUEL PUMP DISCHARGE	N	C-18026-C SH 1 B-1	C ACT	0.5 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-82-78 DG 103 FUEL PUMP DISCHARGE	N	C-18026-C SH 2 B-1	C ACT	0.5 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-82-79 DG103 FUEL PUMP RECIRC	N	C-18026-C SH 2 C-1	C ACT	0.75 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-82-80 DG102 FUEL PUMP RECIRC	N	C-18026-C SH 1 B-1	C ACT	0.75 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-82-85 DG 102 STORAGE TANK FILL	N	C-18026-C SH 1 B-3	C ACT	0.75 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-82-86 DG 102 STORAGE TANK FOOT	N	C-18026-C SH 1 C-3	C ACT	1.5 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-82-87 DG 103 STORAGE TANK FOOT	N	C-18026-C SH 2 A-3	C ACT	1.5 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-96-11 102-1 COMPRESSOR DISCHARGE	N	C-18026-C SH 1 E-1	C ACT	0.75 SCV	SEA	DE / C / NA			FE–Q (R)	NOTE 1

THIRD TEN YEAR INTERVAL— VALVES
NINE MILE POINT NUCLEAR POWER STATION— UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: EMERGENCY DIESEL GENERATOR AUXILIARIES (DG)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-96-12 102-2 COMPRESSOR DISCHARGE	N	C-18026-C SH 1 E-2	C ACT	0.75 SCV	SEA	DE / C / NA			FE–Q (R)	NOTE 1
CKV-96-121 DG 102 AIR START MOTOR CHECK	N	C-18026-C SH 1 F-3	C ACT	0.375 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-96-122 DG 103 AIR START MOTOR CHECK	N	C-18026-C SH 2 F-3	C ACT	0.375 CHV	SEA	DE / OC / NA			FE–Q (F&R)	NOTE 1 NOTE 2
CKV-96-38 103-1 COMPRESSOR DISCHARGE	N	C-18026-C SH 2 E-1	C ACT	0.75 SCV	SEA	DE / C / NA			FE–Q (R)	NOTE 1
CKV-96-39 103-2 COMPRESSOR DISCHARGE	N	C-18026-C SH 2 E-2	C ACT	0.75 SCV	SEA	DE / C / NA			FE–Q (R)	NOTE 1
PSV-96-15 TANK 96-04	N	C-18026-C SH 1 F-1	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-16 TANK 96-05	N	C-18026-C SH 1 G-1	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3

SYSTEM: EMERGENCY DIESEL GENERATOR AUXILIARIES (DG)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-96-17 TANK 96-06	N	C-18026-C SH 1 G-1	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-18 TANK 96-07	N	C-18026-C SH 1 H-1	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-19 TANK 96-08	N	C-18026-C SH 1 H-1	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-20 DG 102 AIR HEADER	N	C-18026-C SH 1 G-3	C ACT	0.5 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-44 TANK1	N	C-18026-C SH 2 F-1	C ACT	0.5 REV	SEA	DE / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-45 TANK 2	N	C-18026-C SH 2 G-1	C ACT	0.5 REV	SEA	DE / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-46 TANK 3	N	C-18026-C SH 2 G-1	C ACT	0.5 REV	SEA	DE / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-47 TANK 4	N	C-18026-C SH 2 H-1	C ACT	0.5 REV	SEA	DE / OC / NA			RT–10Y	NOTE 1 NOTE 3

SYSTEM: EMERGENCY DIESEL GENERATOR AUXILIARIES (DG)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-96-48 TANK 5	N	C-18026-C SH 2 H-1	C ACT	0.5 REV	SEA	DE / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-96-49 DG 103 AIR HEADER	N	C-18026-C SH 2 G-3	C ACT	0.5 REV	SEA	DE / OC / NA			RT–10Y	NOTE 1 NOTE 3
SOV-96-108 DG 103 PINION DRIVES	N	C-18026-C SH 2 F-3	B ACT	0.375 TWV	SOA	C / O / C			FE–Q ST–Q (O)	NOTE 1 NOTE 2
SOV-96-86 DG 102 PINION DRIVES	N	C-18026-C SH 1 F-3	B ACT	0.375 TWV	SOA	C / O / C			FE–Q ST–Q (O)	NOTE 1 NOTE 2

NOTES FOR EMERGENCY DIESEL GENERATOR AUXILIARIES VALVE TABLE

1. This augmented component is voluntarily included, based on its relative importance to nuclear safety, and tested as per NMPC requirements.

2. The monthly start and operability test per Technical Specification 4.6.3.b can satisfy the NMPC requirements for testing of this valve. The valve is a skid-mounted component and is an integral part required for the emergency diesel generator starting. Failure of the valve to properly operate would be readily indicated by failure of the diesel to start. In accordance with NUREG-1482 Section 3.4, proper operation of this valve is demonstrated by starting the emergency diesel generator.

3. Pressure relief valves in this section shall be tested during the 3rd Ten-Year inservice test interval.

SYSTEM: EMERGENCY COOLING (EC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-05-01R VENT	2	C-18017-C D-2	A ACT	1 GLV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
IV-05-02R VENT	2	C-18017-C D-1	A ACT	1 GLV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
IV-05-03R VENT	2	C-18017-C D-1	A ACT	1 GLV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
IV-05-04R VENT	2	C-18017-C E-2	A ACT	1 GLV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
BV-05-05 VENT	2	C-18017-C E-2	B ACT	1.5 GLV	MOA	C / OC / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (O&C) PI–2Y	
BV-05-07 VENT	2	C-18017-C E-3	B ACT	1.5 GLV	MOA	C / OC / AI	FE–Q ST–Q PI–2Y		FE–Q ST–Q (O&C) PI–2Y	

SYSTEM: EMERGENCY COOLING (EC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-05-11 VENT	2	C-18017-C D-2	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
IV-05-12 VENT	2	C-18017-C E-2	A ACT	1 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
PSV-28.2-02 CRD-KEEPFULL	2	C-18017-C B-6	C ACT	0.5 REL	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
CKV-28.2-05 CRD-KEEPFULL	2	C-18017-C C-6	C ACT	0.5 CHV	SEA	DE / C / NA	FE–Q		FE–Q (R)	
PSV-28.2-08 CRD-KEEPFULL	2	C-18017-C G-6	C ACT	0.5 REL	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
CKV-28.2-11 CRD-KEEPFULL	2	C-18017-C F-6	C ACT	0.5 CHV	SEA	DE / C / NA	FE–Q		FE–Q (R)	
CKV-36-57 STM FLOW	1	C-18017-C A-6	C ACT	1 EFV	SEA	O / C / NA	FE–Q	EC-ROJ-1	FE–R (R)	NOTE 2
CKV-36-62 STM FLOW	1	C-18017-C A-6	C ACT	1 EFV	SEA	O / C / NA	FE–Q	EC-ROJ-1	FE–R (R)	NOTE 2
CKV-36-67 STM FLOW	1	C-18017-C A-6	C ACT	1 EFV	SEA	O / C / NA	FE–Q	EC-ROJ-1	FE–R (R)	NOTE 2

SYSTEM: EMERGENCY COOLING (EC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-36-72 STM FLOW	1	C-18017-C A-6	C ACT	1 EFV	SEA	O / C / NA	FE–Q	EC-ROJ-1	FE–R (R)	NOTE 2
CKV-39-03 INBOARD IV X-5B	1	C-18017-C D-6	A/C ACT	10 CHV	SEA	C / OC / NA	FE–Q LJ	EC-ROJ-2	FE–R (F&R) LJ–P	
CKV-39-04 INBOARD IV X-5A	1	C-18017-C E-6	A/C ACT	10 CHV	SEA	C / OC / NA	FE–Q LJ	EC-ROJ-2	FE–R (F&R) LJ–P	
IV-39-05 OUTBOARD IV X-5B	1	C-18017-C C-6	A ACT	10 GLV	AOA	C / OC / O	FE–Q ST–Q FS–Q LJ PI–2Y	EC-ROJ-3	FE–R ST–R (O&C) FS–R (O) LJ–P PI–2Y	
IV-39-06 OUTBOARD IV X-5A	1	C-18017-C F-6	A ACT	10 GLV	AOA	C / OC / O	FE–Q ST–Q FS–Q LJ PI–2Y	EC-ROJ-3	FE–R ST–R (O&C) FS–R (O) LJ–P PI–2Y	
IV-39-07R INBOARD IV X-3A	1	C-18017-C D-4	A ACT	10 GTV	MOA	O / OC / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (O&C) LJ-P PI–2Y	
IV-39-08R INBOARD IV X-3B	1	C-18017-C E-4	A ACT	10 GTV	MOA	O / OC / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (O&C) LJ-P PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: EMERGENCY COOLING (EC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-39-09R OUTBOARD IV X-3A	1	C-18017-C D-4	A ACT	10 GTV	MOA	O / OC / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (O&C) LJ-P PI–2Y	
IV-39-10R OUTBOARD IV X-3B	1	C-18017-C E-4	A ACT	10 GTV	MOA	O / OC / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (O&C) LJ-P PI–2Y	
IV-39-11R DRAIN	2	C-18017-C B-4	A ACT	1 GTV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
IV-39-12R DRAIN	2	C-18017-C B-4	A ACT	1 GTV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
IV-39-13R DRAIN	2	C-18017-C G-4	A ACT	1 GTV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3

SYSTEM: EMERGENCY COOLING (EC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-39-14R DRAIN	2	C-18017-C G-4	A ACT	1 GTV	AOA	O / OC / C	FE–Q ST–Q FS–Q LK-2Y PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ-2Y PI–2Y	NOTE 3
CKV-39-166 KEEPFULL	2	C-18017-C C-6	C ACT	0.5 CHV	SEA	DE / C / NA	FE–Q		FE–Q (R)	
CKV-39-170 KEEPFULL	2	C-18017-C F-6	C ACT	0.5 CHV	SEA	DE / C / NA	FE–Q		FE–Q (R)	
BV-60-03 MAKE-UP	3	C-18017-C G-1	B ACT	4 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	
BV-60-04 MAKE-UP	3	C-18017-C B-1	B ACT	4 GLV	AOA	C / OC / C	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	
CKV-60-05	3	C-18017-C B-1	C ACT	4 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
CKV-60-06	3	C-18017-C G-1.	C ACT	4 CHV	SEA	DE / O / NA	FE–Q		FE–Q (F)	
LCV-60-17 LEVEL CONTROL	3	C-18017-C B-2	B ACT	4 GLV	AOA	DE / O / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O) FS–Q (O) PI–2Y	

SYSTEM: EMERGENCY COOLING (EC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
LCV-60-18 LEVEL CONTROL	3	C-18017-C G-2	B ACT	4 GLV	AOA	DE / O / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O) FS–Q (O) PI–2Y	

NOTES FOR EMERGENCY COOLING VALVE TABLE

1. Pressure Relief valves in this section shall be tested during the 3rd Ten-Year Inservice Test Interval. A minimum of 20% of the valves of each type and manufacturer within the same system shall be tested within any 48 months. This 20% shall be previously untested valves, if they exist.

2. Verification of proper valve closure is by an audible indication (aurally), when the excess flow check valve closes, a noticeable noise is generated by the hydraulic surge within the piping, followed by an obvious marked decrease in the flow noise through the line. Visual observation of any flow from the drain piping is not possible since the drain line is hard piped directly to the equipment drain tank. The testing methodology was previously approved per the Safety Evaluation of March 7, 1991 (TAC NO. 60450).

3. Emergency condenser vent and drain valves are not containment isolation valves. These valves are leak-rate tested to quantify and minimize bypass leakage. The function maximum differential pressure for bypass leakage concerns is containment pressure post-accident (DBA). A seat leak test performed in accordance with 10 CFR 50, Appendix J adequately demonstrates valve conformance to design leakage requirements. A test frequency of at least every 2 years will be maintained in accordance with the Code.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
EC-ROJ-1

System	:	EMERGENCY COOLING
Valve(s)	:	CKV-36-57; CKV-36-62; CKV-36-67; CKV-36-72
IST Category	:	C
ASME Class	:	1
Function	:	Excess Flow Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves are located on instrument lines which function to provide signals relating emergency cooling system conditions to station operations personnel, as well as automatic trip systems for normal and emergency operation of the station. Exercising the excess flow check valves during normal operation imposes undue risk to plant operations personnel since the fluid medium is high pressure (normally greater than 800 psig), high temperature (approximately 200 - 300 °F) and highly contaminated reactor coolant or requires system intrusion to provide a test medium source. The instruments on the lines protected by these check valves are typically required to operate during cold shutdowns as well as during normal operation. Exercising the excess flow check valve requires removing the corresponding instrument from service. This could cause spurious instrument signal fluctuations to occur, resulting in the inadvertent automatic initiation or trip of systems. During the 2nd Ten-Year Interval, this justification was approved as a relief request per the Safety Evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	Excess flow check valves cannot be partial-stroke tested in the reverse direction.
Cold Shutdown Testing	:	Testing during cold shutdown would require unusual plant lineups solely for testing and would remove instrumentation from service while the testing was in progress.
Refueling Outage Testing	:	The valves will be full-stroked exercised closed during refueling outages.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
EC-ROJ-2

System	:	EMERGENCY COOLING
Valve(s)	:	CKV-39-03; CKV-39-04
IST Category	:	A/C
ASME Class	:	1
Function	:	Emergency Condenser Return Check
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	Full-stroke exercising requires placing the emergency cooling system into operation. If forward flow exercising was performed during power operation, a slug of cold water would be delivered to the reactor, resulting in a power spike. Depending on initial plant conditions, a reactor scram could occur. Under controlled conditions, the emergency cooling system is placed in service for capacity testing once every five years, as required by Technical Specification 4.1.3.a. Capacity testing is limited to reduce the thermal and hydraulic cycles on the system experienced during these tests. Reverse flow closure exercising of these valves is also not practicable during normal operation or cold shutdown. No remote indication of obturator position is available for these valves. The valves are located inside the primary containment. During operation or cold shutdowns, manual exercising of the valves requires containment entry, system intrusion (thereby breaching the reactor coolant pressure boundary), can violate the containment integrity, would require a 10CFR50 Appendix J leak rate test, and would require a in-service system pressure test. Since primary containment is inerted with nitrogen, access is not available on a quarterly or cold shutdown basis. (NUREG-1482, Section 3.1.1.3)
Quarterly Partial Stroke Testing	:	Partial stroke testing requires the same conditions as full-stroke testing.
Cold Shutdown Testing	:	Testing during cold shutdown would require deinerting the containment. Deinerting to perform inservice testing is not required (NUREG-1482, Section 3.1.1.3).

Refueling Outage Testing : When the emergency cooling system is placed in service for the capacity test, the valves will be full-stroke exercised (FE). If the capacity test is not scheduled to be conducted prior to or during power ascension following a refueling outage, full-stroke exercising to the open position will be performed during the refueling outage using a mechanical exerciser as permitted by OM-10 Section 4.3.2.4(b).

Exercising in the reverse direction will be performed by the 10CFR50 Appendix J testing during refueling outages.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
EC-ROJ-3

System	:	EMERGENCY COOLING
Valve(s)	:	IV-39-05; IV-39-06
IST Category	:	A
ASME Class	:	1
Function	:	Emergency Condenser Return Isolation Valves
Quarterly Test Requirements	:	Exercise tests in accordance with OM–10 4.2.1
Refueling Outage Test Justification	:	To exercise, stroke-time, and fail-safe test these valves during plant operation would require closing of manual block valves BV-39-01 and BV-39-02 to prevent system initiation. If testing were performed without closing the manual block valves during power operation, a slug of cold water would be delivered to the reactor, resulting in a power spike. Depending on initial plant conditions, a reactor scram could occur. The manual block valves BV-39-01 and BV-39-02 cannot be operated during power operation due to their location inside the primary containment. Since primary containment is inerted with nitrogen, access is not available during normal operations.
Quarterly Partial Stroke Testing	:	The conditions required for a partial stroke test are the same as those for a full stroke test.
Cold Shutdown Testing	:	Testing during cold shutdown would require deinerting the containment. Deinerting to perform inservice testing is not required (NUREG-1482, Section 3.1.1.3).
Refueling Outage Testing	:	The valves will be exercised (FE), stroke-timed (ST), and fail-safe (FS) tested during each refueling outage.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: SPENT FUEL POOL COOLING (FP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-49-53 COND LETDOWN	3	C-18008-C H-2	B PASS	8 TPV	AOA	C / C / C			PI–2Y	NOTE 1
BV-54-12 FILTER INLET	3	C-18008-C E-5	B ACT	6 BFV	AOA	DE / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-54-13 FILTER INLET	3	C-18008-C E-4	B ACT	6 BFV	AOA	DE / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-54-16 COOLER RETURN	3	C-18008-C H-1	B PASS	6 PGV	AOA	O / O / O			PI–2Y	NOTE 1
BV-54-17 SFP SUCTION	3	C-18008-C B-4	B PASS	10 PGV	AOA	O / O / O			PI–2Y	NOTE 1
BV-54-18 PIT SUCTION	3	C-18008-C A-4	B PASS	10 PGV	AOA	C / C / C			PI–2Y	NOTE 1
BV-54-34 SLUDGE	3	C-18008-C F-4	B PASS	8 PGV	AOA	C / C / C			PI–2Y	NOTE 1
BV-54-35 SLUDGE	3	C-18008-C E-6	B PASS	8 PGV	AOA	C / C / C			PI–2Y	NOTE 1
BV-54-37 PRE-COAT	3	C-18008-C F-4	B PASS	3 BFV	AOA	C / C / C			PI–2Y	NOTE 1

SYSTEM: SPENT FUEL POOL COOLING (FP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-54-38 PRE-COAT	3	C-18008-C E-5	B PASS	3 BFV	AOA	C / C / C			PI–2Y	NOTE 1
BV-54-39 FILTER VENT	3	C-18008-C F-4	B PASS	3 BFV	AOA	C / C / C			PI–2Y	NOTE 1
BV-54-40 FILTER VENT	3	C-18008-C F-5	B PASS	3 BFV	AOA	C / C / C			PI–2Y	NOTE 1
BV-85-160 RW LETDOWN	3	C-18008-C H-2	B PASS	6 GLV	AOA	C / C / C			PI–2Y	NOTE 1
CKV-54-131 SIPHON BKR	3	C-18008-C D-1	C ACT	2 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-54-133 SIPHON BKR	3	C-18008-C D-1	C ACT	2 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-54-45 COOLER OUTLET	3	C-18008-C H-5	C ACT	6 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
CKV-54-46 COOLER OUTLET	3	C-18008-C H-4	C ACT	6 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
CKV-54-71 SPF INLET	3	C-18008-C D-1	C ACT	6 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
CKV-54-72 SPF INLET	3	C-18008-C C-1	C ACT	6 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1

SYSTEM: SPENT FUEL POOL COOLING (FP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
FCV-54-14 COOLER INLET	3	C-18008-C F-5	B ACT	6 BFV	AOA	DE / O / C			FE–Q ST–Q (O) PI–2Y	NOTE 1
FCV-54-15 COOLER INLET	3	C-18008-C F-4	B ACT	6 BFV	AOA	DE / O / C			FE–Q ST–Q (O) PI–2Y	NOTE 1

NOTES FOR SPENT FUEL POOL COOLING VALVE TABLE

1. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested per NMPC requirements.

2. These valves will be full-stroke exercised (FE) utilizing the following attributes during exercising:

   - Full-stroke exercise open by hand
   - Inspect for foreign material
   - Inspect for damaged seat and disc
   - Gravity return to close position

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: FEEDWATER (FW/HPCI)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-31-01R OUTBOARD IV X-4A	1	C-18005-C SH 2 B-3	A/C ACT	18 CHV	SEA	DE / C / NA	FE–Q LJ	FW/HPCI-ROJ-1	FE–R (R) LJ–P	
CKV-31-02R OUTBOARD IV X-4B	1	C-18005-C SH 2 B-3	A/C ACT	18 CHV	SEA	DE / C / NA	FE–Q LJ	FW/HPCI-ROJ-1	FE–R (R) LJ–P	
IV-31-07 INBOARD IV X-4A	1	C-18005-C SH 2 B-3	A ACT	18 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y	FW/HPCI-CSJ-1	FE–CS ST–CS (C) LJ–P PI–2Y	
IV-31-08 INBOARD IV X-4B	1	C-18005-C SH 2 B-3	A ACT	18 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y	FW/HPCI-CSJ-1	FE–CS ST–CS (C) LJ–P PI–2Y	

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
FW/HPCI-CSJ-1

System	:	FEEDWATER
Valve(s)	:	IV-31-07, IV-31-08
IST Category	:	A
ASME Class	:	1
Function	:	Feedwater Injection Isolation Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4
Cold Shutdown Test Justification	:	Full-stroke exercising these valves closed during normal plant operation would require a significant reduction in power and the isolation of one loop of feedwater flow (reduction in normal feedwater supply to the reactor vessel). This would introduce undesirable operational transients which could result in a reactor trip.
Quarterly Partial Stroke Testing	:	Partial-stroke exercising these valves quarterly increases the risk of valve closure during plant power generation.(NUREG-1482, Section 4.2.4) In addition, it could cause degrading feedwater nozzle temperature transients which could cause cracking (Reference: NUREG-0619).
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) and stroke-timed (ST) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
FW/HPCI-ROJ-1

System	:	FEEDWATER
Valve(s)	:	CKV-31-01R, CKV-31-02R
IST Category	:	A/C
ASME Class	:	1
Function	:	Feedwater Injection Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	There is no provision for position indication of the obturator. As a result, valve closure must be verified by leakage testing. Exercising these valves closed during normal plant operation would require a significant reduction in power and the isolation of one loop of feedwater flow (reduction in normal feedwater supply to the reactor vessel). This would introduce undesirable operational transients which could result in a reactor trip. In addition, it could cause degrading feedwater nozzle temperature transients which could cause cracking (Reference: NUREG-0619).
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety. (NUREG-1482, Section 4.1.4).
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) by the 10CFR50 Appendix J testing performed during refueling outages.

SYSTEM: INSTRUMENT AIR (IA)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-94-91 RECEIVER #11 / RECEIVER #12 INTER-TIE	N	C-18011-C SH 2 E-2	B ACT	4 PGV	AOA	O / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
CKV-113-242 TANK 113-254 TO RB TRACK BAY DOOR SEAL	N	C-18011-C SH 2 F-4	C ACT	0.5 CHV	SEA	DE / C / NA			FE–Q (R)	NOTE 1
CKV-94-181 #11 INTER-COOLER DRAIN CHECK	N	C-18011-C SH 1 A-6	C ACT	CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-94-191 #12 INTER-COOLER DRAIN CHECK	N	C-18011-C SH 1 A-6	C ACT	CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1 NOTE 2
CKV-94-49 SERVICE AIR INTER-TIE	N	C-18011-C SH 1 F-4	C ACT	2 CHV	SEA	DE / C / NA			FE–Q (R)	NOTE 1
CKV-94-51 #11 RECEIVER OUTLET	N	C-18011-C SH 2 E-1	C ACT	3 CHV	SEA	DE / O / NA			FE–Q (F)	NOTE 1
BV-94-164 AUTO BYPASS	N	C-18011-C SH 2 F-2	B ACT	3 BLV	AOA	C / O / O			FE–Q ST–Q (O) FS–Q (O) PI–2Y	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: INSTRUMENT AIR (IA)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-113-247 R.B. TRACK BAY DOOR	N	C-18011-C SH 2 F-3	C ACT	0.75 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-94-05C #11 AFTER-COOLER	N	C-18011-C SH 2 D-2	C ACT	0.75 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-94-06C #12 AFTER-COOLER	N	C-18011-C SH 2 D-4	C ACT	0.75 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-94-45 #11 INTER-COOLER	N	C-18011-C SH 2 B-1	C ACT	0.75 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
PSV-94-47 #12 INTER-COOLER	N	C-18011-C SH 2 B-3	C ACT	0.75 REV	SEA	C / OC / NA			RT–10Y	NOTE 1 NOTE 3
SOV-94-01/20U1 COMPRESSOR #11 HALF LOAD	N	C-18011-C SH 2 B-2	B ACT		SOA	DE / O /			FE–Q	NOTE 1 NOTE 2
SOV-94-01/20U2 COMPRESSOR #11 FULL LOAD	N	C-18011-C SH 2 B-2	B ACT		SOA	DE / O /			FE–Q	NOTE 1 NOTE 2
SOV-94-02/20U1 COMPRESSOR #12 HALF LOAD	N	C-18011-C SH 2 B-4	B ACT		SOA	DE / O /			FE–Q	NOTE 1 NOTE 2

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: INSTRUMENT AIR (IA)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
SOV-94-02/20U2 COMPRESSOR #12 FULL LOAD	N	C-18011-C SH 2 B-4	B ACT		SOA	DE / O /			FE–Q	NOTE 1 NOTE 2
SOV-94-09 COMPRESSOR #11 COOLER INLET	3	C-18011-C SH 2 C-1	B ACT	0.75 GTV	SOA	DE / O / O			FE–Q	NOTE 1 NOTE 2
SOV-94-10 COMPRESSOR #12 COOLER INLET	3	C-18011-C SH 2 B-3	B ACT	0.75 GTV	SOA	DE / O / O			FE–Q	NOTE 1 NOTE 2
VLV-94-201 DRYER 94-169 EXHAUST	N	C-18011-C SH 2 G-3	B ACT	2 BLV	AOA	DE / C / C			FE–Q	NOTE 1 NOTE 4
VLV-94-202 DRYER 94-168 EXHAUST	N	C-18011-C SH 2 F-3	B ACT	2 BLV	AOA	DE / C / C			FE–Q	NOTE 1 NOTE 4
VLV-94-206 DRYER #11 BYPASS	N	C-18011-C SH 2 F-1	B ACT	2 BLV	AOA	C / C / O			FE–Q	NOTE 1 NOTE 4
VLV-94-208 DRYER 94-168 EXHAUST	N	C-18011-C SH 2 F-2	B ACT	2 BLV	AOA	DE / C / C			FE–Q	NOTE 1 NOTE 4
VLV-94-209 DRYER 94-169 EXHAUST	N	C-18011-C SH 2 G-2	B ACT	2 BLV	AOA	DE / C / C			FE–Q	NOTE 1 NOTE 4

NOTES FOR INSTRUMENT AIR VALVE TABLE

1. This augmented component is voluntarily included, based on its relative importance to nuclear safety and tested as per NMPC requirements.

2. The valve is a skid-mounted component and is an integral part required for the instrument air compressor operation. In accordance with NUREG-1482, Section 3.4, proper operation of this valve is demonstrated by operating the instrument air compressor.

3. Pressure relief valves in this section shall be tested during the 3rd Ten-Year Inservice Test Interval.

4. The valve is a skid-mounted component and is an integral part required for the instrument air dryer operation. In accordance with NUREG-1482 Section 3.4, proper operation of this valve is demonstrated by operating the instrument air dryer.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: LIQUID POISON (LP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-42-19 PUMP #11 DISCHARGE	2	18019-C E-4	C ACT	1.5 CHV	SEA	DE / OC./ NA	FE–Q		FE–Q (F&R)	
CKV-42-20 PUMP #12 DISCHARGE	2	18019-C E-5	C ACT	1.5 CHV	SEA	DE / OC / NA	FE–Q		FE–Q (F&R)	
EV-42-34 #11 SQUIB	2	18019-C C-5	D ACT	1.5 EXV	EXA	C / O / NA	EX–TS		EX–TS	
EV-42-35 #12 SQUIB	2	18019-C C-4	D ACT	1.5 EXV	EXA	C / O / NA	EX–TS		EX–TS	
PSV-42-36 PUMP #12	2	18019-C E-4	C ACT	1 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
PSV-42-37 PUMP #11	2	18019-C E-3	C ACT	1 REV	SEA	C / OC / NA	RT–10Y-S		RT–10Y-S	NOTE 1
BV-42.1-01 INJECTION	1	18019-C A-4	B PASS	1.5 GTV	MAA	O / O / NA	PI–2Y		PI–2Y	
CKV-42.1-02 INJECTION INBOARD IV X-131	1	18019-C A-4	A/C ACT	2 CHV	SEA	DE / OC / NA	FE–Q LJ	LP-ROJ-1	FE–R (F&R) LJ–P	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: LIQUID POISON (LP)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-42.1-03 INJECTION OUTBOARD IV X-131	1	18019-C B-4	A/C ACT	2 CHV	SEA	DE / OC / NA	FE–Q LJ	LP-ROJ-1	FE–R (F&R) LJ–P	

NOTES FOR LIQUID POISON VALVE TABLE

1. Pressure Relief valves in this section shall be tested during the 3rd Ten-Year inservice test interval. A minimum of 20% of the valves of each type and manufacture within the same system shall be tested within any 48 months. This 20% shall be previously untested valves, if they exist.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
LP-ROJ-1

System	:	LIQUID POISON
Valve(s)	:	CKV-42.1-02, CKV-42.1-03
IST Category	:	A/C
ASME Class	:	1
Function	:	Liquid poison injection line containment isolation check valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	Full-stroke exercising the check valves during normal operation or cold shutdown would require firing a squib valve and injecting water into the reactor vessel using the liquid poison pumps. Injecting water during operation could result in adverse plant conditions, such as changes in reactivity, power transients, thermal-shock-induced cracking, and a possible plant trip. During cold shutdown, firing of the squib valve requires a series of installation/replacement tests, and the scope of this testing would delay start up. (Reference: NUREG-1482, Section 4.1.4). Additionally, exercising these valves must be verified from inside primary containment. Since the primary containment is inerted with nitrogen, access is not available on a quarterly or cold shutdown basis.
Quarterly Partial Stroke Testing	:	Partial stroke testing requires the same conditions as full-stroke testing.
Cold Shutdown Testing	:	Testing during cold shutdown would require deinerting the containment. Deinerting to perform inservice testing is not required (NUREG-1482, Section 3.1.1.3).
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) in conjunction with the Liquid Poison system injection test and by the 10CFR50 Appendix J testing during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: MAIN STEAM (MS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-01-01 INBOARD IV X-2A	1	C-18002-C SH 1 B-4	A ACT	24.00 GLV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y	MS-CSJ-1	FE–CS ST–CS (C) LJ–P PI–2Y	
IV-01-02 INBOARD IV X-2B	1	C-18002-C SH 1 D-4	A ACT	24.00 GLV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y	MS-CSJ-1	FE–CS ST–CS (C) LJ–P PI–2Y	
IV-01-03 OUTBOARD IV X-2A	1	C-18002-C SH 1 A-4	A ACT	24.00 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	MS-CSJ-2	FE–CS ST–CS (C) FS–CS (C) LJ–P PI–2Y	NOTE 1
IV-01-04 OUTBOARD IV X-2B	1	C-18002-C SH 1 E-4	A ACT	24.00 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y	MS-CSJ-2	FE–CS ST–CS (C) FS–CS (C) LJ–P PI–2Y	NOTE 1
CKV-01-76 X-75R(K1)	1	C-18002-C SH 1 A-6	C ACT	0.75 CHV	SEA	O / C / NA	FE–Q	MS-ROJ-1	FE–R (R)	NOTE 2

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: MAIN STEAM (MS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-01-77 X-75R(K2)	1	C-18002-C SH 1 A-6	C ACT	0.75 CHV	SEA	O / C / NA	FE–Q	MS-ROJ-1	FE–R (R)	NOTE 2
CKV-01-78 X-81(K1)	1	C-18002-C SH 1 A-6	C ACT	0.75 CHV	SEA	O / C / NA	FE–Q	MS-ROJ-1	FE–R (R)	NOTE 2
CKV-01-79 X-81(K2)	1	C-18002-C SH 1 A-6	C ACT	0.75 CHV	SEA	O / C / NA	FE–Q	MS-ROJ-1	FE–R (R)	NOTE 2
PSV-01-119A RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119B RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119C RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119D RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: MAIN STEAM (MS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
PSV-01-119F RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119G RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119H RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119J RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
PSV-01-119M RX SAFETY	1	C-18002-C SH 1 C-1	C ACT	6 REV	SEA	C / OC / NA	RT–5Y-S		RT–5Y-S	NOTE 3
BV-37-01 RX HEAD VENT	1	C-18002-C SH 1 D-2	B ACT	2 GTV	MOA	C / OC / AI	FE–Q ST–Q PI–2Y	MS-CSJ-3	FE–CS ST–CS (O&C) PI–2Y	
BV-37-02 RX HEAD VENT	1	C-18002-C SH 1 D-2	B ACT	2 GTV	MOA	C / OC / AI	FE–Q ST–Q PI–2Y	MS-CSJ-3	FE–CS ST–CS (O&C) PI–2Y	

SYSTEM: MAIN STEAM (MS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-37-06 RX HEAD VENT	1	C-18002-C SH 1 D-2	B ACT	2 GTV	MOA	C / OC / AI	FE–Q ST–Q PI–2Y	MS-CSJ-3	FE–CS ST–CS (O&C) PI–2Y	

NOTES FOR MAIN STEAM VALVE TABLE

1. IV-01-03 and IV-01-04 are fail-safe tested by removing electric power from the solenoids.

2. Verification of proper valve closure is by an audible indication (aurally). When the excess flow check valve closes, a noticeable noise is generated by the hydraulic surge within the piping, followed by an obvious marked decrease in the flow noise through the line. Visual observation of any flow from the drain piping is not possible since the drain line is hard piped directly to the equipment drain tank. The testing methodology was previously approved by the Safety Evaluation of March 7, 1991 (TAC NO. 60450).

3. Pressure Relief valves in this section shall be tested during each five-year period of the 3rd Ten-Year Inservice Test Interval. A minimum of 20% of each valve type and manufacturer shall be tested within any 24 month period. This 20% shall be previously untested valves, if they exist.

MS-CSJ-1

System	:	MAIN STEAM
Valve(s)	:	IV-01-01, IV-01-02
IST Category	:	A
ASME Class	:	1
Function	:	Main Steam Line Isolation Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4
Cold Shutdown Test Justification	:	Full-stroke exercising and stroke-time testing result in loss of steam flow from one main steam line to the turbine. To conduct this testing, the plant would undergo a significant transient (i.e., a greater than 50% power reduction must be achieved followed by a corresponding return to 100% power). This evolution typically would take a minimum 12 hours. Also, industry information indicates that closing these valves with high steam flow in the line may be a large contributing factor to observed seat degradation. The valves are designed for partial-stroke exercising with full steam flow during plant operation. However, part-stroke exercising these valves quarterly increases the risk of valve closure during plant power generation. (NUREG-1482, Section 4.2.4)
Quarterly Partial Stroke Testing	:	Partial-stroke exercising these valves quarterly increases the risk of valve closure during plant power generation. (NUREG-1482, Section 4.2.4)
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) and stroke-timed (ST) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
MS-CSJ-2

System	:	MAIN STEAM
Valve(s)	:	IV-01-03, IV-01-04
IST Category	:	A
ASME Class	:	1
Function	:	Main Steam Line Isolation Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4; Fail-Safe Test in accordance with OM-10, para. 4.2.1.6
Cold Shutdown Test Justification	:	Full-stroke exercising and stroke-time testing result in loss of steam flow from one main steam line to the turbine. To conduct this testing, the plant would undergo a significant transient (i.e., a greater than 50% power reduction must be achieved followed by a corresponding return to 100% power). This evolution typically would take a minimum 12 hours. Also, industry information indicates that closing these valves with high steam flow in the line may be a large contributing factor to observed seat degradation. The valves are designed for partial-stroke exercising with full steam flow during plant operation. However, part-stroke exercising these valves quarterly increases the risk of valve closure during plant power generation. (NUREG-1482, Section 4.2.4)
Quarterly Partial Stroke Testing	:	Partial-stroke exercising these valves quarterly increases the risk of valve closure during plant power generation. (NUREG-1482, Section 4.2.4)
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE), stroke-timed (ST) and fail-safe (FS) tested during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
MS-CSJ-3

System	:	MAIN STEAM
Valve(s)	:	BV-37-01, BV-37-02, BV-37-06
IST Category	:	B
ASME Class	:	1
Function	:	Reactor Head Vent Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4
Cold Shutdown Test Justification	:	The design function of these valves is to provide a vent path to primary containment for use during reactor vessel water level changes. This vent path is only utilized during startup, cold shutdowns, and for long-term post-LOCA reactor vessel flooding. There is no design basis which would require these valves to be cycled during reactor power operation. In addition, cycling these valves during full power operation would significantly reduce the margin of safety of the reactor coolant pressure boundary. Failure of the adjacent valve during cycling would introduce a LOCA within the primary containment which would affect operation of equipment necessary for safe shutdown.
Quarterly Partial Stroke Testing	:	Partial-stroke testing during power operation would significantly reduce the margin of safety of the reactor coolant pressure boundary.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) and stroke-timed (ST) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
MS-ROJ-1

System	:	MAIN STEAM
Valve(s)	:	CKV-01-76, CKV-01-77, CKV-01-78, CKV-01-79
IST Category	:	C
ASME Class	:	1
Function	:	Excess Flow Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves are located on instrument lines that provide information to station operations personnel, as well as automatic trip systems for normal and emergency operation of the station. Exercising the excess flow check valves during normal operation imposes an undue risk to plant operations personnel since the fluid medium is high pressure (normally greater than 800 psig), high temperature (approximately 200 - 300 °F) and highly contaminated reactor coolant or requires system intrusion to provide a test medium source. The instruments on the lines protected by these check valves are typically required to operate during cold shutdowns as well as during normal operation. Exercising the excess flow check valve requires removing the corresponding instrument from service. This could cause spurious instrument signal fluctuations to occur, resulting in the inadvertent automatic initiation or trip of systems. This justification was approved as a relief request by the Safety Evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety. (NUREG-1482, Section 4.1.4). Additionally, the instruments on the lines protected by these check valves are typically required to operate during cold shutdowns.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: TRAVERSING INCORE PROBE (NEU)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-201.2-39 TIP N_2 SUPPLY OUTBOARD IV X-23A	2	C-18014-C SH 2 E-1	A/C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q LJ		FE–Q (R) LJ–P	
CKV-201.2-40 TIP N_2 SUPPLY INBOARD IV X-23A	2	C-18014-C SH 2 E-1	A/C ACT	0.75 CHV	SEA	DE / C / NA	FE–Q LJ		FE–Q (R) LJ–P	
EV-36-151 TIP SHEAR	2	C-19405-C	D ACT	0.5 EXV	EXA	O / C / NA	EX–2Y-S		EX–TS	NOTE 1
EV-36-152 TIP SHEAR	2	C-19405-C	D ACT	0.5 EXV	EXA	O / C / NA	EX–2Y-S		EX–TS	NOTE 1
EV-36-153 TIP SHEAR	2	C-19405-C	D ACT	0.5 EXV	EXA	O / C / NA	EX–2Y-S		EX–TS	NOTE 1
EV-36-154 TIP SHEAR	2	C-19405-C	D ACT	0.5 EXV	EXA	O / C / NA	EX–2Y-S		EX–TS	NOTE 1
VLV-36-147 TIP BALL INBOARD IV X-23B	2	C-19405-C	A ACT	0.5 BLV	SOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: TRAVERSING INCORE PROBE (NEU)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
VLV-36-148 TIP BALL INBOARD IV X-23C	2	C-19405-C	A ACT	0.5 BLV	SOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
VLV-36-149 TIP BALL INBOARD IV X-23D	2	C-19405-C	A ACT	0.5 BLV	SOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
VLV-36-150 TIP BALL INBOARD IV X-23E	2	C-19405-C	A ACT	0.5 BLV	SOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	

NOTES FOR TRAVERSING INCORE PROBE VALVE TABLE

1. The TIP shear valves are explosive activated valves that are used to provide a containment isolation barrier should the TIP ball valves fail to operate properly. The shear valve squibs are fired at the interval specified in T.S. 3.1.2, which exceeds the requirements of OM-10, 4.4.1.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: PRIMARY CONTAINMENT VACUUM RELIEF (PCS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-68-01 TORUS TO DW VACUUM BKR	2	C-18006-C SH 2 D-3	C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y		VT–6M LL–2Y	NOTE 1 NOTE 2
CKV-68-02 TORUS TO DW VACUUM BKR	2	C-18006-C SH 2 E-3	C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y		VT–6M LL–2Y	NOTE 1 NOTE 2
CKV-68-03 TORUS TO DW VACUUM BKR	2	C-18006-C SH 2 E-3	C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y		VT–6M LL–2Y	NOTE 1 NOTE 2
CKV-68-04 TORUS TO DW VACUUM BKR	2	C-18006-C SH 2 E-3	C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y		VT–6M LL–2Y	NOTE 1 NOTE 2
CKV-68-05 RB TO TORUS OUTBOARD IV XS-317	2	C-18006-C SH 2 F-2	A/C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y LJ		VT–6M LL–2Y LJ–P	NOTE 1 NOTE 3
CKV-68-06 RB TO TORUS OUTBOARD IV XS-318	2	C-18006-C SH 2 F-2	A/C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y LJ		VT–6M LL–2Y LJ–P	NOTE 1 NOTE 3
CKV-68-07 RB TO TORUS OUTBOARD IV XS-320	2	C-18006-C SH 2 F-2	A/C ACT	30 VRV	SEA	C / OC / NA	VT–6M LL–2Y LJ		VT–6M LL–2Y LJ–P	NOTE 1 NOTE 3

SYSTEM: PRIMARY CONTAINMENT VACUUM RELIEF (PCS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-68-08 RB TO TORUS INBOARD IV XS-317	2	C-18006-C SH 2 F-2	A ACT	30 BFV	AOA	C / OC / O	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) LJ–P PI–2Y	
IV-68-09 RB TO TORUS INBOARD IV XS-318	2	C-18006-C SH 2 F-2	A ACT	30 BFV	AOA	C / OC / O	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) LJ–P PI–2Y	
IV-68-10 RB TO TORUS INBOARD IV XS-320	2	C-18006-C SH 2 F-2	A ACT	30 BFV	AOA	C / OC / O	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (O&C) FS–Q (O) LJ–P PI–2Y	

NOTES FOR PRIMARY CONTAINMENT VACUUM RELIEF VALVE TABLE

1. The OM-1 requirements for the valve to be actuated to verify open and close capability, set pressure, and performance of position sensing accessories are satisfied by the testing required by Technical Specification 4.3.6. The set pressure is determined by measuring the obturator break-away and running force using a torque wrench. The obturator is counter-balanced. Therefore, the break-away and running forces are directly measurable. These forces equate to the differential pressure required to unseat (breakaway) and open (running) the valve fully.

2. The compliance with the Owner's seat tightness (as-left leakage) requirement is satisfied by performance of Technical Specification 4.3.6.b(4) during refueling outages.

3. The compliance with the Owner's seat tightness (as-left leakage) requirement is satisfied by the performance of the 10CFR50 Appendix J testing during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR BUILDING HVAC (RBAC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-202-07 EXHAUST FAN OUTLET	N	C-18013-C H-2	B ACT	54 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-202-08 EXHAUST FAN OUTLET	N	C-18013-C H-1	B ACT	54 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-202-15 SUPPLY FAN INLET	N	C-18013-C B-3	B ACT	54 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-202-16 SUPPLY FAN INLET	N	C-18013-C B-3	B ACT	54 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-202-31 EXHAUST FAN INLET	N	C-18013-C F-2	B ACT	54 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-202-32 EXHAUST FAN INLET	N	C-18013-C F-2	B ACT	54 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR BUILDING HVAC (RBAC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-202-34 EM EXHAUST FAN OUTLET	N	C-18013-C H-4	B ACT	12 BFV	AOA	C / OC / O			FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 1
BV-202-35 EM EXHAUST FAN OUTLET	N	C-18013-C H-5	B ACT	12 BFV	AOA	C / OC / O			FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 1
BV-202-36 EVS INLET	N	C-18013-C F-2	B ACT	12 BFV	AOA	O / OC / O			FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 1
BV-202-37 EM EXHAUST FAN INLET	N	C-18013-C F-4	B ACT	12 BFV	AOA	C / OC / O			FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 1
BV-202-38 EM EXHAUST FAN INLET	N	C-18013-C F-5	B ACT	12 BFV	AOA	C / OC / O			FE–Q ST–Q (O&C) FS–Q (O) PI–2Y	NOTE 1
BV-202-47 EM EXHAUST FAN CROSS-TIE	N	C-18013-C G-4	B ACT	2 BFV	AOA	C / O / O			FE–Q ST–Q (O) FS–Q (O) PI–2Y	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR BUILDING HVAC (RBAC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-202-74 COOLING AIR	N	C-18013-C F-4	B ACT	2 BFV	AOA	C / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-202-75 COOLING AIR	N	C-18013-C F-5	B ACT	2 BFV	AOA	C / OC / C			FE–Q ST–Q (O&C) FS–Q (C) PI–2Y	NOTE 1
BV-203-132 OFF-GAS EXHAUST FAN OUTLET	N	C-18021-C SH 3 H-3	B ACT	22 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-203-133 OFF-GAS EXHAUST FAN OUTLET	N	C-18021-C SH 3 H-5	B ACT	22 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-203-14 TB EXHAUST FAN OUTLET	N	C-18021-C SH 1 H-3	B ACT	72 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1
BV-203-15 TB EXHAUST FAN OUTLET	N	C-18021-C SH 1 H-4	B ACT	72 BFV	AOA	DE / C / C			FE–Q ST–Q (C) FS–Q (C) PI–2Y	NOTE 1

SYSTEM: REACTOR BUILDING HVAC (RBAC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
DISK-201.2-1094	N	C-18014-C SH 1 G-1	D ACT	20 RD	SEA	C / O / NA			RD–5Y	NOTE 1
DISK-201.2-1095	N	C-18014-C SH 1 G-1	D ACT	20 RD	SEA	C / O / NA			RD–5Y	NOTE 1
FCV-202-50 EM EXHAUST FAN FLOW CONTROL	N	C-18013-C H-4	B ACT	12 BFV	AOA	DE / O / O			FE–Q ST–Q (O) FS–Q (O) PI–2Y	NOTE 1
FCV-202-51 EM EXHAUST FAN FLOW CONTROL	N	C-18013-C H-5	B ACT	12 BFV	AOA	DE / O / O			FE–Q ST–Q (O) FS–Q (O) PI–2Y	NOTE 1

NOTES FOR REACTOR BUILDING HVAC VALVE TABLE

1. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested as per NMPC requirements.

SYSTEM: REACTOR BUILDING CLOSED LOOP COOLING (RBCLC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-70-25 CHILLER INLET	3	C-18047-C G-1	B ACT	4 PGV	AOA	DE / O / O	FE–Q ST–Q FS–Q		FE–Q ST–Q (O) FS–Q (O)	
BV-70-26 CHILLER INLET	3	C-18047-C E-1	B ACT	4 PGV	AOA	DE / O / O	FE–Q ST–Q FS–Q		FE–Q ST–Q (O) FS–Q (O)	
BV-70-68 RBCLC TO SF HX #11	3	C-18008-C H-3	B ACT	6 GLV	AOA	DE / O / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O) FS–Q (O) PI–2Y	
BV-70-69 RBCLC TO SF HX #11	3	C-18008-C H-5	B ACT	6 GLV	AOA	DE / O / O	FE–Q ST–Q FS–Q PI–2Y		FE–Q ST–Q (O) FS–Q (O) PI–2Y	
CKV-70-04 PUMP DISCHARGE	3	C-18022-C SH 2 A-6	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	RBCLC-CSJ-1	PE–Q (F) FE–Q (R) FE–CS (F)	
CKV-70-05 PUMP DISCHARGE	3	C-18022-C SH 2 B-6	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	RBCLC-CSJ-1	PE–Q (F) FE–Q (R) FE–CS (F)	
CKV-70-06 PUMP DISCHARGE	3	C-18022-C SH 2 C-6	C ACT	12 CHV	SEA	DE / OC / NA	FE–Q	RBCLC-CSJ-1	PE–Q (F) FE–Q (R) FE–CS (F)	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR BUILDING CLOSED LOOP COOLING (RBCLC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-70-257 EMERG. MAKE-UP	3	C-18022-C SH 3 D-2	C ACT	6 CHV	SEA	DE / C / NA	FE–Q		FE–Q (R)	
CKV-70-272 PASS SAMPLE COOLER RETURN	3	C-18041-C SH 7 F-5	C ACT	0.75 CHV	SEA	DE / C / NA			FE–Q (R)	NOTE 1
CKV-70-442 NORMAL MAKE-UP	3	C-18022-C SH 3 D-2	C ACT	1.5 CHV	SEA	DE / C / NA	FE–Q		FE–Q (R)	
CKV-70-93 RRP SUPPLY	2	C-18022-C SH 2 C-4	C ACT	4 CHV	SEA	DE / C / NA	FE–Q	RBCLC-ROJ-1	FE–R (R)	
CKV-70-95 AIR COOLER SUPPLY	2	C-18022-C SH 2 E-4	C ACT	8 CHV	SEA	O / C / NA	FE–Q	RBCLC-ROJ-1	FE–R (R)	
IV-70-92 RRP RETURN	2	C-18022-C SH 2 B-4	B ACT	4 GTV	MOA	O / C / AI	FE–Q ST–Q PI–2Y	RBCLC-CSJ-2	FE–CS ST–CS (C) PI–2Y	
IV-70-94 AIR COOLER RETURN	2	C-18022-C SH 2 C-4	B ACT	8 GTV	MOA	O / C / AI	FE–Q ST–Q PI–2Y	RBCLC-CSJ-3	FE–CS ST–CS (C) PI–2Y	
VLV-70-47 RW RETURN	3	C-18022-C SH 2 A-4	B ACT	6 GTV	MAA	O / C / NA			FE–R (C)	NOTE 1

SYSTEM: REACTOR BUILDING CLOSED LOOP COOLING (RBCLC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
VLV-70-48 RW SUPPLY	3	C-18022-C SH 2 A-4	B ACT	6 GTV	MAA	O / C / NA			FE–R (C)	NOTE 1
VLV-70-67 PASS SAMPLE COOLER SUPPLY	3	C-18041-C SH 7 F-6	B ACT	0.75 GTV	MAA	O / C / NA			FE–R (C)	NOTE1

NOTES FOR REACTOR BUILDING CLOSED LOOP COOLING VALVE TABLE

1. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested per NMPC requirements. This valve serves as the boundary between the safety-related and non-safety-related piping. (See Reference 26)

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
RBCLC-CSJ-1

System	:	REACTOR BUILDING CLOSED LOOP COOLING
Valve(s)	:	CKV-70-04, CKV-70-05, CKV-70-06
IST Category	:	C
ASME Class	:	3
Function	:	Pump Discharge Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Cold Shutdown Test Justification	:	The system flow rate and the number of pumps running are a function of the system heat loads. In most cases, it is not possible to operate the system with a single pump and align the system to achieve OM test conditions without adversely affecting plant operation. The system flow meter is in the common header. With more than one pump running, it is not possible to identify the flow that each pump is providing. The valves are partial-stroke exercised during normal system operation. During cold shutdowns, each pump can be tested individually. This will provide a measured flow rate which can be used to verify full-stroke exercising of each pump's discharge check valve.
Quarterly Partial Stroke Testing	:	Partial-stroke exercising is performed during normal system operation.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
RBCLC-CSJ-2

System	:	REACTOR BUILDING CLOSED LOOP COOLING
Valve(s)	:	IV-70-92
IST Category	:	B
ASME Class	:	2
Function	:	Reactor Recirculation Pump Coolers Blocking Valve
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4
Cold Shutdown Test Justification	:	Testing this valve during normal operation requires interruption of the cooling water to the reactor recirculation pump coolers. Failure of these valves to reopen could cause extensive damage to the reactor recirculation pump motors and pump seals, a reactor coolant pressure boundary component. Securing a recirculation pump to permit exercising requires a significant power reduction that could result in a turbine trip and scram.
Quarterly Partial Stroke Testing	:	Partial-stroke exercising during power operation increases the potential for failure of cooling water supply to the reactor recirculation pump coolers, which would require plant shutdown.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) and stroke-timed (ST) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
RBCLC-CSJ-3

System	:	REACTOR BUILDING CLOSED LOOP COOLING
Valve(s)	:	IV-70-94
IST Category	:	B
ASME Class	:	2
Function	:	Drywell Air Cooler Blocking Valve
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.2.1; Stroke Time in accordance with OM-10, para. 4.2.1.4
Cold Shutdown Test Justification	:	Testing this valve during normal operation requires interruption of the cooling water to the primary containment air coolers. A loss of these coolers could result in a scram due to high drywell pressure as a result of high drywell temperature.
Quarterly Partial Stroke Testing	:	Partial-stroke exercising during power operation increases the potential for failure of cooling water supply to the drywell ail coolers, which would require plant shutdown.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) and stroke-timed (ST) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
RBCLC-ROJ-1

System	:	REACTOR BUILDING CLOSED LOOP COOLING
Valve(s)	:	CKV-70-93, CKV-70-95
IST Category	:	C
ASME Class	:	2
Function	:	Drywell Air and Recirculation Pump Coolers Supply Check Valve
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	Exercising these valves during normal plant operation requires interruption of the cooling water to the primary containment drywell air coolers and reactor recirculation pump motor coolers for an extended period of time. Loss of the drywell air coolers could result in a reactor scram due to high drywell temperatures and the resulting high drywell pressure. Loss of cooling water to the recirculation pump motor and pump seal coolers for more than a few minutes will cause damage to the recirculation pumps seals, a reactor coolant pressure boundary component. Additionally, exercising of the valves requires intrusion into the system to verify reverse flow closure. Testing during normal plant operations or during cold shutdowns is not practical, since the RBCLC header is a common line for other system loads. Significant time is involved to set up test equipment to perform a back-leakage test which may delay plant startup from cold shutdown. (NUREG-1482, Section 4.1.4)
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety. (NUREG-1482, Section 4.1.4).
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR RECIRCULATION (RR)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-32-64 X-41	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-70 X-41	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-76 X-44	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-82 X-44	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-88 X-42	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-94 X-42	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-100 X-38	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-106 X-38	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-112 X-47	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-118 X-47	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1

SYSTEM: REACTOR RECIRCULATION (RR)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-32-125 X-43	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-131 X-43	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-138 X-37	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-144 X-37	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-151 X-36	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-157 X-36	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-164 X-35	1	C-18020-C A-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-170 X-35	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-177 X-34	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-183 X-34	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1

SYSTEM: REACTOR RECIRCULATION (RR)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-32-204 X-29	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-210 X-29	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-215 X-30	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-221 X-30	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-226 X-31	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-232 X-31	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-237 X-32	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-243 X-32	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-248 X-28	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-32-254 X-28	1	C-18020-C A-5	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR RECIRCULATION (RR)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-44.1-07 X-82(K1)	1	C-18015-C E-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1
CKV-44.1-12 X-82(K2)	1	C-18015-C E-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RR-ROJ-1	FE–R (R)	NOTE 1

NOTES FOR REACTOR RECIRCULATION VALVE TABLE

1. Verification of proper valve closure is by an audible indication (aurally). When the excess flow check valve closes, a noticeable noise is generated by the hydraulic surge within the piping, followed by an obvious marked decrease in the flow noise through the line. Visual observation of any flow from the drain piping is not possible since the drain line is hard piped directly to the equipment drain tank. The testing methodology was previously approved per the Safety Evaluation of March 7, 1991 (TAC NO. 60450).

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
RR-ROJ-1

System	:	REACTOR RECIRCULATION
Valve(s)	:	CKV-32-64, CKV-32-70, CKV-32-82, CKV-32-88, CKV-32-94, CKV-32-100, CKV-32-106, CKV-32-112, CKV-32-118, CKV-32-125, CKV-32-138, CKV-32-144, CKV-32-151, CKV-32-157, CKV-32-164, CKV-32-170, CKV-32-177, CKV-32-183, CKV-32-204, CKV-32-210, CKV-32-215, CKV-32-221, CKV-32-226, CKV-32-232, CKV-32-237, CKV-32-243, CKV-32-248, CKV-32-254, CKV-44.1-07, CKV-44.1-12
IST Category	:	C
ASME Class	:	1
Function	:	Excess Flow Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves are located on instrument lines that provide information to station operations personnel, as well as automatic trip systems for normal and emergency operation of the station. Exercising the excess flow check valves during normal operation imposes an undue risk to plant operations personnel since the fluid medium is high pressure (normally greater than 800 psig), high temperature (approximately 200 - 300 °F) and highly contaminated reactor coolant or requires system intrusion to provide a test medium source. The instruments on the lines protected by these check valves are typically required to operate during cold shutdowns as well as during normal operation. Exercising the excess flow check valve requires removing the corresponding instrument from service. This could cause spurious instrument signal fluctuations to occur, resulting in the inadvertent automatic initiation or trip of systems. This justification was approved as a relief request by the Safety Evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.

Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety. (NUREG-1482, Section 4.1.4). Additionally, the instruments on the lines protected by these check valves are typically required to operate during cold shutdowns.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: LIQUID RAD WASTE DISPOSAL (RWS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-83.1-09 DWEDT INBOARD IV X-26	2	C-18045-C SH 7 B-1	A ACT	3 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-83.1-10 DWEDT OUTBOARD IV X-26	2	C-18045-C SH 7 E-1	A ACT	3 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	
IV-83.1-11 DWFDT INBOARD IV X-25	2	C-18045-C SH 9 E-1	A ACT	4 GTV	MOA	O / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-83.1-12 DWFDT OUTBOARD IV X-25	2	C-18045-C SH 9 E-1	A ACT	4 GLV	AOA	O / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: REACTOR VESSEL INSTRUMENTATION (RXVI)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-36-48 X-72A	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-53 X-72B	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-120 X-53	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-125 X-71A	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-130 X-71B	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-135 X-71D	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-140 X-71E	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-145 X-71F	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-160 X-72D	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-165 X-72E	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1

SYSTEM: REACTOR VESSEL INSTRUMENTATION (RXVI)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-36-170 X-72F	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-175 X-133	1	C-18015-C D-6	C ACT	0.75 EFV	SEA	O / C / NA	FE–Q	RXVI-ROJ-1	FE–R (R)	NOTE 1
CKV-36-509 BACKFILL	N	C-18016-C SH 3 E-2	A/C ACT	0.25 CHV	SEA	DE / C / NA	NA		FE–R (R) LK–R	NOTE 2 NOTE 3
CKV-36-510 BACKFILL	N	C-18016-C SH 3 F-2	A/C ACT	0.25 CHV	SEA	DE / C / NA	NA		FE–R (R) LK–R	NOTE 2 NOTE 3
CKV-36-511 BACKFILL	N	C-18016-C SH 3 E-3	A/C ACT	0.25 CHV	SEA	DE / C / NA	NA		FE–R (R) LK–R	NOTE 2 NOTE 3
CKV-36-512 BACKFILL	N	C-18016-C SH 3 F-3	A/C ACT	0.25 CHV	SEA	DE / C / NA	NA		FE–R (R) LK–R	NOTE 2 NOTE 3
CKV-36-513 BACKFILL	N	C-18016-C SH 3 E-5	A/C ACT	0.25 CHV	SEA	DE / C / NA	NA		FE–R (R) LK–R	NOTE 2 NOTE 3

SYSTEM: REACTOR VESSEL INSTRUMENTATION (RXVI)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-36-514 BACKFILL	N	C-18016-C SH 3 F-5	A/C ACT	0.25 CHV	SEA	DE / C / NA	NA		FE–R (R) LK–R	NOTE 2 NOTE 3

NOTES FOR REACTOR VESSEL INSTRUMENTATION VALVE TABLE

1. Verification of proper valve closure is by an audible indication (aurally). When the excess flow check valve closes, a noticeable noise is generated by the hydraulic surge within the piping, followed by an obvious marked decrease in the flow noise through the line. Visual observation of any flow from the drain piping is not possible since the drain line is hard piped directly to the equipment drain tank. The testing methodology was previously approved per the Safety Evaluation of March 7, 1991 (TAC NO. 60450).

2. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested per NMPC requirements.

3. Pre-service and as-found water leakage tests shall be performed in accordance with the specified engineering methods and acceptance criteria. A satisfactory leakage test satisfies full-stroke exercising. The leakage test may be performed on the bench or in-situ.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
RXVI-ROJ-1

System	:	REACTOR VESSEL INSTRUMENTATION
Valve(s)	:	CKV-36-48, CKV-36-53, CKV-36-120, CKV-36-125, CKV-36-130, CKV-36-135, CKV-36-140, CKV-36-145, CKV-36-160, CKV-36-165, CKV-36-170, CKV-36-175
IST Category	:	C
ASME Class	:	1
Function	:	Excess Flow Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	These valves are located on instrument lines that provide information to station operations personnel, as well as automatic trip systems for normal and emergency operation of the station. Exercising the excess flow check valves during normal operation imposes an undue risk to plant operations personnel since the fluid medium is high pressure (normally greater than 800 psig), high temperature (approximately 200 - 300 °F) and highly contaminated reactor coolant or requires system intrusion to provide a test medium source. The instruments on the lines protected by these check valves are typically required to operate during cold shutdowns as well as during normal operation. Exercising the excess flow check valve requires removing the corresponding instrument from service. This could cause spurious instrument signal fluctuations to occur, resulting in the inadvertent automatic initiation or trip of systems. This justification was approved as a relief request by the Safety Evaluation of March 7, 1991 (TAC NO. 60450).
Quarterly Partial Stroke Testing	:	Partial stroke in the reverse direction is not practical.
Cold Shutdown Testing	:	Valve testing requires extensive equipment setup and system reconfiguration. Exercising during cold shutdowns is costly and burdensome with no increase in safety. (NUREG-1482, Section 4.1.4). Additionally, the instruments on the lines protected by these check valves are typically required to operate during cold shutdowns.
Refueling Outage Testing	:	The valves will be full-stroke exercised (FE) during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: SHUTDOWN COOLING SYSTEM (SDC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-38-01 INBOARD IV X-8	1	C-18018-C SH 1 H-3	A ACT	14 GTV	MOA	C / C / AI	FE–Q ST–Q LK–2Y LJ PI–2Y	SDC-CSJ-1	FE–CS ST–CS (C) LK–2Y PI–2Y	NOTE 1
IV-38-02 OUTBOARD IV X-8	1	C-18018-C SH 1 H-3	A ACT	14 GTV	MOA	C / C / AI	FE–Q ST–Q LK–2Y LJ PI–2Y	SDC-CSJ-1	FE–CS ST–CS (C) LK–2Y PI–2Y	NOTE 1
CKV-38-12 OUTBOARD IV X-7	1	C-18018-C SH 1 A-3	A/C ACT	14 CHV	SEA	DE / C / NA	FE–Q LK–2Y	SDC-CSJ-1	FE–CS (R) LK–2Y	NOTE 1
IV-38-13 INBOARD IV X-7	1	C-18018-C SH 1 A-3	A ACT	14 GTV	MOA	C / C / AI	FE–Q ST–Q LK–2Y LJ PI–2Y	SDC-CSJ-1	FE–CS ST–CS (C) LK–2Y PI–2Y	NOTE 1
CKV-38-216 INBOARD IV X-8	1	C-18018-C SH 1 H-4	C ACT	0.75 CHV	SEA	DE / O / NA	FE–Q	SDC-ROJ-1	FE–R (F)	NOTE 2
CKV-38-165 OUTBOARD SDC WATER SEALCHECK PIV	2	C-18007-C SH 2 C-3	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y		FE–Q (F&R) LK–TS	NOTE 3

SYSTEM: SHUTDOWN COOLING SYSTEM (SDC)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
CKV-38-166 OUTBOARD SDC WATER SEALCHECK PIV	2	C-18007-C SH 2 C-4	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y		FE–Q (F&R) LK–TS	NOTE 3
CKV-38-167 OUTBOARD SDC WATER SEALCHECK PIV	2	C-18007-C SH 2 C-1	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y		FE–Q (F&R) LK–TS	NOTE 3
CKV-38-168 OUTBOARD SDC WATER SEALCHECK PIV, X-7 & X-8	2	C-18007-C SH 2 C-2	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y LJ		FE–Q (F&R) LK–TS	NOTE 3
CKV-38-169 INBOARD SDC WATER SEALCHECK PIV, X-7 & X-8	1	C-18007-C SH 2 D-3	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y LJ		FE–Q (F&R) LK–TS	NOTE 3, 4
CKV-38-170 INBOARD SDC WATER SEALCHECK PIV, X-7 & X-8	1	C-18007-C SH 2 D-4	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y LJ		FE–Q (F&R) LK–TS	NOTE 3, 4
CKV-38-171 INBOARD SDC WATER SEALCHECK PIV, X-7 & X-8	1	C-18007-C SH 2 D-1	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y LJ		FE–Q (F&R) LK–TS	NOTE 3, 4
CKV-38-172 INBOARD SDC WATER SEALCHECK PIV, X-7 & X-8	1	C-18007-C SH 2 D-2	A/C ACT	0.75 CHV	SEA	DE / OC / NA	FE–Q LK–2Y LJ		FE–Q (F&R) LK–TS	NOTE 3, 4

NOTES FOR SHUTDOWN COOLING VALVE TABLE

1. The valve is a Containment Isolation Valve that is provided with a qualified seal water system in accordance with 10CFR50 Appendix J for all post-accident conditions. Therefore, this valve does not require an Appendix J Type C air/nitrogen test. The valve is required to be leak tested with water at a pressure of at least $1.1*P_a$ (per 10CFR50 Appendix J) in the direction of the applied seal water. Water leakage limits are assigned to the Containment Isolation Valve to ensure that qualified water seal pressure of $1.1*P_a$ is maintained.

2. The check valve is the Containment Isolation Valve for a thermal-relief assembly (orifice and check valve) that passes the excess volume to the reactor vessel, bypassing IV-38-01. This assembly is provided with a qualified seal water system in accordance with 10CFR50 Appendix J for all post-accident conditions. Therefore, this valve does not require an Appendix J Type C air/nitrogen test. The assembly is tested in accordance with Note 1. The orifice size controls the permissible flow, therefore, no leakage limit is assigned to the check valve.

3. The valve is a Primary Reactor Coolant System Pressure Isolation Valve and is leak tested in accordance with Technical Specification 3/4.2.7.1. However, in no case shall testing exceed the Code required interval of 2 years.

4. The valve is a Containment Isolation Valve. The valve provides the second isolation after IV-38-01 and IV-38-13. The valve is required to open to provide the qualified seal water in accordance with 10CFR50 Appendix J for all post-accident conditions. Therefore, the valve does not require an Appendix J Type C air/nitrogen test.

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
SDC-CSJ-1

System	:	REACTOR SHUTDOWN COOLING
Valve(s)	:	IV-38-01, IV-38-02, IV-38-13, CKV-38-12
IST Category	:	A (IV-38-01, IV-38-02, IV-38-13) A/C (CKV-38-12)
ASME Class	:	1
Function	:	Shutdown Cooling Isolation Valves
Quarterly Test Requirements	:	A: Exercise in accordance with OM–10, para. 4.2.1; A: Stroke Time in accordance with OM-10, para. 4.2.1.4 A/C: Exercise in accordance with OM-10, para. 4.3.2
Cold Shutdown Test Justification	:	The Reactor Shutdown Cooling System is designed to cool reactor coolant below the temperature and pressure at which the main condenser may be used as the heat sink. The motor-operated gate valves, which normally function (open and close) at a service temperature of approximately 350°F and pressure <120 psig (designed interlocks) were not designed to cycle at the higher differential pressure that would be experienced if cycled at full power.
Quarterly Partial Stroke Testing	:	Partial-stroke testing during power is not possible due to system design pressures and interlocks.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) and stroke-timed (ST) during cold shutdowns, as applicable.

NINE MILE POINT UNIT 1 IST PROGRAM
REFUELING OUTAGE TEST JUSTIFICATION
SDC-ROJ-1

System	:	REACTOR SHUTDOWN COOLING
Valve(s)	:	CKV-38-216
IST Category	:	C
ASME Class	:	1
Function	:	Shutdown Cooling Line Thermal Protection Containment Isolation Valve
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Refueling Outage Test Justification	:	This valve is not equipped with an obturator position indicator. Exercising of this valve must be verified from inside primary containment. Since the primary containment is inerted with nitrogen, access is not available on a quarterly or cold shutdown basis.
Quarterly Partial Stroke Testing	:	The conditions required for a partial stroke test are the same as those for a full stroke test.
Cold Shutdown Testing	:	Testing during cold shutdown would require deinerting the containment. Deinerting to perform inservice testing is not required. (NUREG. 1482, Section 3.1.1.3)
Refueling Outage Testing	:	The valve will be full-stroke exercised (FE) during refueling outages.

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: POST-ACCIDENT SAMPLING (SS)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
DISK-110-640	1	C-18020-C H-1	D ACT	1 RD	SEA	C / O / NA	RD–5Y		RD–2Y	
IV-110-127 INBOARD IV X-139	1	C-18020-C G-1	A ACT	1 GLV	MOA	C / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-110-128 OUTBOARD IV X-139	1	C-18020-C G-1	A ACT	1 GLV	MOA	C / C / AI	FE–Q ST–Q LJ PI–2Y		FE–Q ST–Q (C) LJ–P PI–2Y	
IV-122-03 OUTBOARD IV X-82	1	C-18041-C SH 7 A-3	A ACT	1 GLV	AOA	C / C / C	FE–Q ST–Q FS–Q LJ PI–2Y		FE–Q ST–Q (C) FS–Q (C) LJ–P PI–2Y	

THIRD TEN YEAR INTERVAL—VALVES
NINE MILE POINT NUCLEAR POWER STATION—UNIT 1
TEST REQUIREMENTS AND COMMITMENTS

SYSTEM: EMERGENCY SERVICE WATER (SW)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
BV-72-123 RX BLDG	3	C-18022-C SH 1 A-2	B ACT	4 GTV	MAA	O / C / NA			FE–R	NOTE 1
BV-72-70 RX BLDG	3	C-18022-C SH 1 B-2	B ACT	4 GTV	MAA	O / C / NA			FE–R	NOTE 1
CKV-72-11 ESW PUMP #12 DISCHARGE	3	C-18022-C SH 1 D-5	C ACT	14 CHV	SEA	DE / OC / NA	FE–Q	SW-CSJ-1	FE–Q (R) FE–CS (F)	
CKV-72-12 ESW PUMP #11 DISCHARGE	3	C-18022-C SH 1 C-5	C ACT	14 CHV	SEA	DE / OC / NA	FE–Q	SW-CSJ-1	FE–Q (R) FE–CS (F)	
CKV-72-21 SW HEADER CHECK	3	C-18022-C SH 1 D-2	C ACT	20 CHV	SEA	DE / C / NA	FE–Q	SW-CSJ-2	FE–CS (R)	
CKV-72-22 SW HEADER CHECK	3	C-18022-C SH 1 D-3	C ACT	20 CHV	SEA	DE / C / NA	FE–Q	SW-CSJ-2	FE–CS (R)	

SYSTEM: EMERGENCY SERVICE WATER (SW)

VALVE NO.	ASME CLASS	PID COORD	IST CAT	SIZE (IN) TYPE	ACTU TYPE	POSITION NORM/SAFE/FAIL	ASME OM REQUIRED TEST–FREQ	RELIEF REQ C.S. JUST. RFO JUST.	IST PROGRAM PLAN COMMITMENT TEST–FREQ (DIR)	REMARKS
IV-72-479 SW TO DW OUTBOARD IV X-122	2	C-18027-C SH 2 C-4	A PASS	1 GTV	MAA	LC / C / NA	LJ		LJ–P	
IV-72-480 SW TO DW INBOARD IV X-122	2	C-18027-C SH 2 C-4	A PASS	1 GTV	MAA	LC / C / NA	LJ		LJ–P	

NOTES FOR EMERGENCY SERVICE WATER VALVE TABLE

1. This augmented component is voluntarily included based on its relative importance to nuclear safety and tested per NMPC requirements. This valve is a normally open manual valve which serves as the boundary between the safety related and non-safety related piping. (See Reference 26)

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
SW-CSJ-1

System	:	EMERGENCY SERVICE WATER
Valve(s)	:	CKV-72-11, CKV-72-12
IST Category	:	C
ASME Class	:	3
Function	:	Emergency Service Water Pump Discharge Check Valves
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Cold Shutdown Test Justification	:	The service water system is required to operate during normal plant operations. The ESW pumps operate at a lower pressure than the normal service water header pressure. Exercising is not possible without isolating the associated service water header. System heat loads prevent removing or de-pressurizing an entire service water header during operation, since the removal could result in a plant trip.
Quarterly Partial Stroke Testing	:	Partial-stroke exercise requires the same plant conditions as full-stroke exercising.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) during cold shutdowns.

NINE MILE POINT UNIT 1 IST PROGRAM
COLD SHUTDOWN TEST JUSTIFICATION
SW-CSJ-2

System	:	EMERGENCY SERVICE WATER
Valve(s)	:	CKV-72-21, CKV-72-22
IST Category	:	C
ASME Class	:	3
Function	:	Service Water Supply Check Valves (separate safety-related service water from non-safety-related service water)
Quarterly Test Requirements	:	Exercise in accordance with OM–10, para. 4.3.2
Cold Shutdown Test Justification	:	The service water system is required to operate during normal plant operations. The ESW pumps operate at a lower pressure than the normal service water header pressure. Exercising is not possible without isolating the associated service water header. System heat loads prevent removing or de-pressurizing an entire service water header during operation, since the removal could result in a plant trip.
Quarterly Partial Stroke Testing	:	Partial-stroke exercise requires the same plant conditions as full-stroke exercising.
Cold Shutdown Testing	:	The valves will be full-stroke exercised (FE) during cold shutdowns.