PSEG NUCLEAR L.L.C.
SALEM/OPERATIONS

S2.OP-ST.CAN-0007(Q) - REV. 24

REFUELING OPERATIONS - CONTAINMENT CLOSURE

USE CATEGORY : I

- Biennial Review Performed: Yes ____ No ✓
- DCP Packages and Affected Document Numbers incorporated into this revision: None
- The following OTSCs were incorporated into this revision: None

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REVISION SUMMARY

The following changes were incorporated into this revision:

- Revised procedure to reflect deletion of Containment Isolation Valves 2VC2 and 2VC3. Affected attachments include; Attachment 4 (Page 5 of 10), Attachment 21, Attachment 22, and Attachment 70 (Page 14 of 22). Containment Isolation Valves 2VC2 and 2VC3 are being replaced with testable blind flanges 2VCF2 and 2VCF3 IAW DCP 80091075, Replace 2VC2 and 2VC3 Valves with Blind Flanges. **[80091075-0551]**

- Attachment 47 - Deleted reference to valves 21-24SJ16 and associated notes (**) due to indicated valves not being part of the containment isolation boundary. This change was incorporated to provide additional clarification regarding the Inside Containment Isolation Valves for 2SJ12/13 Cold Leg Injection Line penetration, is consistent with the valve layout currently delineated in P&ID 205334 (Sheet 1), is in response to Operator Feedback, and is considered to be editorial in nature.

- Revised Attachment 4 (Page 2 of 10) to indicate reference to "Attachment 69" versus "Attachment 77". This change was incorporated to provide additional clarification regarding the appropriate attachment to be performed, is consistent the guidance delineated Attachment 69, is in response to Operator Feedback, and is considered to be editorial in nature.

- Revised Attachment 4 and Attachment 70 (Section 4.0) to provide a mechanism for indicating (✓) if Attachment 69 is completed for the respective penetration. This change was incorporated to assist the CAN-7 NCO to track usage of Attachment 69 forms, is in response to Operator Feedback, and is considered to be editorial in nature.

- Revised Attachment 69 to provide a clarification regarding which (5 - 67) the attachment is applicable to. This change was incorporated to provide additional clarification to the CAN-7 NCO, is in response to Operator Feedback, and is considered to be editorial in nature.

- Revised Step 5.4.6 and NOTE to indicate the Control Room is periodically updated (as required) regarding status changes of penetrations being tracked within this procedure during implementation versus maintaining a duplicate copy in the Control Room. This change was incorporated to provide additional flexibility, in response to Operator Feedback, and is considered to be editorial in nature.

IMPLEMENTATION REQUIREMENTS

Effective Date: 04/23/2008

DCP 80091075 - Rev. 0, Replace 2VC2 and 2VC3 with Blind Flanges

REFUELING OPERATIONS - CONTAINMENT CLOSURE

TABLE OF CONTENTS

EXHIBITS

1.0 PURPOSE

1.1 To provide the instructions necessary to establish and maintain Refueling Operations - Containment Closure IAW Technical Specification 4.9.4.1. This requirement is applicable during movement of irradiated fuel within the containment. **[C0265]**

1.2 To provide the instructions necessary to establish and maintain Containment Closure for Mid-Loop Operations with Fuel in the Vessel.

1.3 This procedure is performed:

1.3.1 Prior to the start of the movement of irradiated fuel in the Containment Building.

1.3.2 At least once per 7 days during the movement of irradiated fuel in the Containment Building.

1.3.3 When required between surveillance intervals to track penetration status changes.

1.3.4 Prior to draining RCS to Mid-Loop Operation.

1.3.5 At least once per 7 days during Mid-Loop Operation.

2.0 PREREQUISITES

2.1 None

3.0 PRECAUTIONS AND LIMITATIONS

___ 3.1 Steps identified with a dollar sign ($) are those items required to meet Technical Specification acceptance criteria. Such steps, if not satisfactorily completed, may have reportability requirements and are to be brought to the immediate attention of the SM/CRS.

___ 3.2 Permission must be obtained from the SM/CRS prior to deactivating or repositioning any valve(s).

___ 3.3 The Surveillance interval, as described in Technical Specification 4.0.2, begins with the date and time recorded in Step 5.1.1.

___ 3.4 Upon completion of this procedure, the procedure shall be maintained in the Control Room and can be amended by attaching additional Penetration Closure Status Change Requests (Attachment 69), as required, for tracking purposes. This ensures Containment Closure is maintained between surveillance interval IAW Section 5.2 of this procedure.

___ 3.5 A Bezel INFO Tag is to be placed on Remote Operated Valves that are used to ensure containment closure IAW this procedure.

___ 3.6 A White Caution Tag is to be placed on all flanges installed to support Containment Closure IAW this procedure.

___ 3.7 When performing Attachments 6 through 66, the permanent label that identifies valves as "Containment Isolation Valves" should be verified in place on all manual valves. If the permanent label is not in place, a Caution tag should be hung or a permanent label installed.

___ 3.8 Independent Verification is NOT required for Attachments 4 or 69, unless Attachments 6 through 66 are performed to verify isolation. The Independent Verification need only be performed on those components that were repositioned IAW the applicable attachment(s). (6 through 66).

___ 3.9 All components that are repositioned in Attachment 6-66 will be added to the WCD as "VER" with position restored to their normal position upon termination of the procedure.

___ 3.10 During Movement of Irradiated Fuel Within the Containment, the time requirement to establish Containment Closure is within ONE HOUR IAW Technical Specification 3.9.4.

___ 3.11 During Midloop Operations, the time requirement to establish Containment Closure is PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR as delineated in UFSAR Section 5.5.15.

___ 3.12 Utilization of the Equipment Hatch Ventilation Barrier (EHVB) to fulfill the requirements for Containment Closure is ONLY ALLOWED during Refueling Outage 2R16 to support replacement of the Steam Generators IAW S-2-RC-MDC-2151, Containment Closure in Modes 5 and 6 During SG Replacement.

___ 3.13 IF the Equipment Hatch Ventilation Barrier (EHVB) is being utilized to fulfill Containment Closure requirements during Refueling Outage 2R16 AND Containment Closure is required in response to a Loss of Shutdown Cooling, THEN:

- The Equipment Hatch Ventilation Barrier (EHVB) is required to be closed IAW SC.MD-FR.CAN-0002(Q) PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR.

  AND

- The Inner Containment Equipment Hatch is required to be installed with a minimum of four bolts to eliminate air gaps WITHIN FOUR HOURS.

___ 3.14 IF the Equipment Hatch Ventilation Barrier (EHVB) is being utilized to fulfill Containment Closure requirements during Refueling Outage 2R16 AND Containment Closure is required in response to a Fuel Handling Accident, THEN the Equipment Hatch Ventilation Barrier (EHVB) is required to be closed IAW SC.MD-FR.CAN-0002(Q) WITHIN ONE HOUR.

4.0 EQUIPMENT/MATERIAL REQUIRED

None

5.0 **PROCEDURE**

5.1 **Demonstrating Containment Closure**

___ 5.1.1 **RECORD** the Date and Time this procedure is started.
Date:_____/Time:_____

5.1.2 **CONCURRENTLY PERFORM** the following:

___ $
- **REVIEW** Components "Off Normal and Off-Normal Tagged" Lists for effect on Containment Closure. Date:_____/Time:_____

___ $
- **REVIEW** any work in progress Work Orders for effect on Containment Closure. Date:_____/Time:_____
  - **REQUEST** Containment Coordinator review work in progress with the SM/CRS at least once per shift.
  - **REQUEST** Outage Shift Manager review work in progress with the SM/CRS at least once per shift.
  - **REQUEST** Operations Planning and Scheduling Office review work in progress with the SM/CRS at least once per shift.

___ $
- **RECORD** test results by initialing the SAT or UNSAT column using the Acceptance Criteria given in Attachment 1, Section 1.0.
Date:_____/Time:_____

___ $
- **RECORD** test results by initialing the SAT or UNSAT column using the Acceptance Criteria given in Attachment 1, Section 2.0.
Date:_____/Time:_____

___ $
- **RECORD** test results by initialing the SAT or UNSAT column using the Acceptance Criteria given in Attachment 2.
Date:_____/Time:_____

___ $
- **REQUEST** Maintenance Controls **RECORD** test results by initialing the SAT or UNSAT column using the Acceptance Criteria given in Attachment 3.
Date:_____/Time:_____

(step continued on next page)

5.1.2 (continued)

___ $

♦ **RECORD** test results for the Mechanical Penetrations listed in Attachment 4 by initialing the SAT or UNSAT column.
CIRCLE the Acceptance Criteria used IAW the guidance provided in Attachment 4.

Date:_____/Time:_____

NOTE

Both Containment Airlock are allowed to be open during movement of irradiated fuel within the Containment provided Containment Closure can be established within 1 HOUR IAW S2.OP-AB.CONT-0001(Q), Containment Closure.

___ ♦ IF Containment Closure is for movement of irradiated fuel within the containment,
THEN:

- **REQUEST** the OCC post the following door closure areas as protected for Containment Closure during movement of irradiated fuel within the containment. The posting should state: "Containment Closure is set for movement of irradiated fuel within the containment. Door closure areas must be maintained clear of all obstructions except hoses and cables capable of quick isolation and disconnect."
  - ♦ El 100' and 130' Airlock (as applicable)
  - ♦ Outage Equipment Hatch (OEH) Door OR Equipment Hatch Ventilation Barrier (EHVB), as applicable
- **REQUEST** the OCC post the following areas as protected for Containment Closure during movement of irradiated fuel within the containment. The posting should state: "Containment Closure is set for movement of irradiated fuel within the containment. No work is permitted within this protected area unless specifically authorized by the SM/CRS."
  - ♦ Mechanical Penetration Area 78' el.
  - ♦ Electrical Penetration Area 78' el.
  - ♦ Inner Steam Penetration Entrance (If S/G are NOT closed inside containment)
  - ♦ Outer Steam Penetration Entrance (If S/G are NOT closed inside containment)

(step continued on next page)

5.1.2 (continued)

NOTE

Both Containment Airlock are allowed to be open during Mid-Loop Operation provided Containment Closure can be established PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR IAW S2.OP-AB.CONT-0001(Q), Containment Closure.

___ ♦ IF Containment Closure is for Mid-Loop Operation, THEN:

- IF the time to ONSET OF CORE BOILING FOLLOWING LOSS OF RHR is less than or equal to one hour, THEN **REQUEST** the OCC post the following door closure areas as protected for Containment Closure during Mid-Loop Operation. The posting should state: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions including all hoses and cables."

  ♦ El 100' and 130' Airlock (as applicable)

  ♦ Outage Equipment Hatch (OEH) Door OR Equipment Hatch Ventilation Barrier (EHVB), as applicable.

- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour, THEN **REQUEST** the OCC post the following door closure areas as protected for Containment Closure during Mid-Loop Operation. The posting should state: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions except hoses and cables capable of quick isolation and disconnect."

  ♦ El 100' and 130' Airlock (as applicable)

  ♦ Outage Equipment Hatch (OEH) Door OR Equipment Hatch Ventilation Barrier (EHVB), as applicable.

(continued on next page)

5.1.2 (continued)

- **REQUEST** the OCC post the following areas as protected for Containment Closure during Mid-Loop Operation. The posting should state: "Containment Closure is set for Mid-Loop Operation. No work is permitted within this protected area unless specifically authorized by the SM/CRS."

  - ♦ Mechanical Penetration Area 78' el.
  - ♦ Electrical Penetration Area 78' el.
  - ♦ Inner Steam Penetration Entrance (If S/G are NOT closed inside containment)
  - ♦ Outer Steam Penetration Entrance (If S/G are NOT closed inside containment)

___ ♦ IF Steam Generator cleaning hoses are connected to the OEH AND Containment Closure is in effect, THEN **REQUEST** the OCC post SG Water Lance Process Trailer Entrance, used for Steam Generator cleaning, as protected for Containment Closure. The posting should state "Containment Closure is established. Evolutions to be performed should be evaluated for impact on Containment Closure status."

5.2 **Penetration Closure Status Change Process**

___ 5.2.1 IF a barrier for a penetration needs to be changed to support outage activities, THEN **COMPLETE** Attachment 69 for the appropriate penetration.

___ 5.2.2 **ENSURE** the appropriate Attachment, 5 - 67, is completed and attached to Attachment 69.

___ 5.2.3 **UPDATE** WCM for components repositioned in Attachment 6-66. Refer to Precaution and Limitation 3.9.

___ 5.2.4 When Attachment 69 is completed, reviewed and approved by the SM/CRS, THEN **RELEASE** the existing barrier to support the activity.

5.3 **Acceptance Criteria**

___ 5.3.1 This surveillance procedure is satisfactory when Attachments 1 through 4 are complete with all equipment listed meeting the Acceptance Criteria stated in each attachment.

$

OR

___ 5.3.2 This surveillance is unsatisfactory:

___ A. Immediately **SUSPEND** all operations involving movement of irradiated fuel in the Containment Building OR consider raising RCS level above Mid-Loop, as applicable.

___ B. **INITIATE** Notification(s) to correct the unsatisfactory condition(s).

___ C. **RECORD** Notification number(s) and reason for unsatisfactory completion on Attachment 68 in the COMMENTS Section.

5.4 **Completion and Review**

NOTE

Permanent labels are installed in the field identifying valves that are Containment Closure valves. Remotely operated valves may be tagged with a Bezel INFO tag.

___ 5.4.1 **APPLY** Bezel INFO Tags to Remote Operated Valves that are used to ensure Containment Closure IAW Attachments 6 through 66.

___ 5.4.2 **APPLY** White Caution Tags to all Blind Flanges installed to support Containment Closure IAW Attachments 6 through 67A.

___ 5.4.3 **UPDATE** WCM for components repositioned in Attachment 6-66. Refer to Precaution and Limitation 3.9.

___ 5.4.4 **COMPLETE** Attachment 68, Sections 1.0 and 2.0, AND **FORWARD** this procedure to the SM/CRS for review.

___ 5.4.5 SM/CRS **PERFORM** the following:

___ A. **REVIEW** this procedure with Attachments 1 through 4, 5 through 67 (as applicable), and 68 for completeness and accuracy.

___ B. IF ANY Evaluation Result is identified as UNSAT for applicable Mode, THEN **ENTER** applicable Technical Specification Action Statement(s).

___ C. **COMPLETE** Attachment 68, Section 3.0.

NOTE

The process describing status changes of penetrations is delineated within Section 5.2, Penetration Closure Status Change Process of this procedure.

___ 5.4.6 **ENSURE** the Control Room is periodically updated (as required) regarding status changes of penetrations being tracked within this procedure during the surveillance interval.

___ 5.4.7 IF the surveillance is required to be performed to satisfy the seven days surveillance following the initial surveillance AND Containment Closure is maintained current IAW Section 5.2,
THEN **PERFORM** Attachment 70 to verify current status of penetrations in the following order:

___ A. **PERFORM** Attachment 70, Sections 1.0 through 3.0.

___ B. **REVIEW** Current Attachment 69 for affected penetrations,
AND **PERFORM** verifications AND **COMPLETE** Attachment 70 for the affected penetration.

___ C. **REVIEW** Current Attachments 5 through 67 for penetrations NOT covered by Attachment 69,
AND **PERFORM** verifications AND **COMPLETE** Attachment 70 for the affected penetration.

___ D. **REVIEW** Current Attachments 4 for penetrations NOT covered by Attachments 5 through 67 and Attachment 69,
AND **PERFORM** verifications AND **COMPLETE** Attachment 70 for the affected penetration.

___ E. **FORWARD** this procedure to the SM/CRS for review.

___ F. SM/CRS **PERFORM** the following:

___ 1. **REVIEW** Attachment 70 for completeness and accuracy.

___ 2. IF ANY Evaluation Result is identified as UNSAT for applicable Mode,
THEN **ENTER** applicable Technical Specification Action Statement(s).

___ 3. **COMPLETE** Attachment 70, Section 5.0.

___ 5.4.8 When the surveillance is terminated,
PERFORM the following:

___ A. **REMOVE** any signs posted IAW Step 5.1.2.

B. **RELEASE** the WCD for components repositioned in Attachment 6-66 AND **UPDATE** WCM for any component not restored to the normal position.

___ C. **FORWARD** completed package to Operations Staff.

END OF PROCEDURE SECTION

6.0 RECORDS

6.1 Retain entire procedure IAW RM-AA-101, Records Management Program.

7.0 REFERENCES

7.1 Updated Final Safety Analysis Report:

7.1.1 Section 6.2, Containment Systems

7.2 Technical Specifications - Unit 2:

7.2.1 3.9.4, Refueling Operations - Containment Building Penetrations

7.3 Procedures:

7.3.1 S2.OP-AB.CONT-0001(Q), Containment Closure
7.3.2 S2.OP-PT.ZZ-0001(Q), Outage Equipment Hatch Door Closure Test
7.3.3 S2.OP-SO.RM-0001(Q), Radiation Monitoring System Operation
7.3.4 S2.OP-SO.WG-0006(Q), Containment Purge to Plant Vent

7.4 Drawings:

7.4.1 205222, No. 1 & 2 Units Fire Protection
7.4.2 205246, No. 1 & 2 Units Demineralized Water - Restricted Areas
7.4.3 205301, No. 2 Unit Reactor Coolant
7.4.4 205302, No. 2 Unit Steam Generator Feed & Condensate
7.4.5 205303, No. 2 Unit Main, Reheat & Turbine By-Pass Steam
7.4.6 205317, No. 2 Unit Compressed Air
7.4.7 205325, No. 2 Unit Steam Generator Drains & Blowdown
7.4.8 205328, No. 2 Chemical and Volume Control Operation
7.4.9 205331, No. 2 Unit Component Cooling
7.4.10 205332, No. 2 Unit Residual Heat Removal
7.4.11 205333, No. 2 Unit Spent Fuel Cooling
7.4.12 205334, No. 2 Unit Safety Injection
7.4.13 205335, No. 2 Unit Containment Spray
7.4.14 205336, No. 2 Unit Auxiliary Feedwater
7.4.15 205338, No. 2 Unit Reactor Containment - Ventilation
7.4.16 205339, No. 2 Unit Waste Disposal Liquid
7.4.17 205342, No. 2 Unit Service Water Nuclear Area
7.4.18 205344, No.2 Unit Sampling
7.4.19 205347, Reac. Cont. & Penetration Area Control Air
7.4.20 233901, Unit 2 - Penetration Area- Electrical Penetrations
7.4.21 208612, Unit 2 React Contain Trays & Conduit El Contain Wall East

7.5 **Others**:

7.5.1 Engineering Evaluation S-C-VAR-MEE-1125
7.5.2 PIR 00950906548, Electrical Penetration 2-3 Leak
7.5.3 NLR-N94228, NRC Violation Response
7.5.4 S-C-CA-CSE-0881, 50.59 Safety Evaluation for Outage Equipment Hatch
7.5.5 S-C-VARX-MSE-0717-0, Safety Evaluation - Type C Leak Rate Testing of Containment Isolation Valves during Mode 6 Refueling Operation
7.5.6 PSBP 324187, Salem RCS Pressurization Studies for Shutdown Configurations with the PS25 Spray Valve Bonnet Removed as a Vent Path.
7.5.7 80072686, Valve S2SA -2SA118 Removal
7.5.8 Calculation DS2.6.0366 - 2R14 Reactor Vessel Decay Heat Load
7.5.9 S-2-RC-MDC-2151, Containment Closure in Modes 5 and 6 During SG Replacement

7.6 **Cross-References**:

7.6.1 Procedures:
- A. RM-AA-101, Records Management Program
- B. S2.OP-DL.ZZ-0002(Q), Control Room Log - Mode 5, 6 and Defueled
- C. S2.OP-ST.CBV-0004(Q), Containment Purge and Pressure-Vacuum Relief Isolation
- D. S2.OP-ST.SJ-0012(Q), Emergency Core Cooling - ECCS Throttle Valves
- E. S2.CH-AD.CN-1144(Q), Non-Routine Unit 2 Steam Generator Fill and Chemical Feed
- F. SC.MD-FR.CAN-0001(Q), Outage Equipment Hatch Installation, Removal, Seal Replacement and Door Manipulation for Containment Closure
- G. SC.MD-FR.CAN-0002(Q), Equipment Hatch Ventilation Barrier (EHVB) Installation, Removal, and Door Manipulation for Containment Closure

7.6.2 Technical Specifications - Unit 2
- A. 3.9.4.c.1, Refueling Operations - Containment Building Penetrations
- B. 3.9.8.1.a, Refueling Operations - Residual Heat Removal Coolant Circulation
- C. 4.9.4.1, Refueling Operations - Containment Building Penetrations Surveillance Requirements

7.7 **Commitments**:

7.7.1 C0265 - NSO LER 311/89-015-00
7.7.2 C0283 - NRC VIOL 311/87-018-01
7.7.3 LER 311/96-015-00, Breach Of Containment Closure During Core Reload
7.7.4 NLR-N89001, Response to Generic Letter 88-17
7.7.5 S-4-ZZ-CSE-1828, Safety Evaluation # S00-056, Commitment Change to NLR-N89001, Response to Generic Letter 88-17

ATTACHMENT 1
(Page 1 of 5)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

SECTION 1.0

EQUIPMENT	ACCEPTANCE CRITERIA (1)	RESULTS	
		SAT	UNSAT
INNER EQUIP HATCH	[ ] Inner Equipment Hatch installed and held in place by a minimum of four bolts OR [ ] Outage Equipment Hatch in place by all 20 bolts installed, AND SAT IAW ATT. 67A OR [ ] Equipment Hatch Ventilation Barrier is installed, AND SAT IAW ATT. 67B		
100 FT EL CONT AIR LOCK	[ ] A minimum of one door is closed OR [ ] BOTH Airlock doors may be opened during **Mid-Loop Operation**, provided the following acceptance criteria is satisfied: **(2)** OR [ ] BOTH Airlock doors may be opened during **movement of irradiated fuel in the containment**, provided the following acceptance criteria is satisfied: **(3)**		

(continued on next page)

ATTACHMENT 1
(Page 2 of 5)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

Section 1.0 (continued)

(1) Check the box for the Acceptance Criteria which is satisfied, where applicable.

(2) Mid-Loop Operation Acceptance Criteria:

- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is less than or equal to one hour, THEN:
  - o All obstructions, including hoses and cables, that would affect airlock door closure are removed, except the ramps and interior platform.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, including all hoses and cables."
- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour, THEN:
  - o All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- Air Lock door is capable of being closed PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR by designated personnel.

(3) Movement of irradiated fuel in the containment Acceptance Criteria:

- All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
- A sign is posted stating: "Containment Closure is set for movement of irradiated fuel in containment. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- Air Lock door is capable of being closed within 1 hour by designated personnel.
- Either the Containment Purge System OR the Auxiliary Building Ventilation System taking a suction from the containment atmosphere are operating.

ATTACHMENT 1
(Page 3 of 5)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

SECTION 1.0 (continued)

EQUIPMENT	ACCEPTANCE CRITERIA (1)	RESULTS	
		SAT	UNSAT
130 FT EL CONT AIR LOCK	[ ] A minimum of one door is closed OR [ ] BOTH Airlock doors may be opened during **Mid-Loop Operation**, provided the following acceptance criteria is satisfied: **(2)** OR [ ] BOTH Airlock doors may be opened during **movement of irradiated fuel in the containment**, provided the following acceptance criteria is satisfied: **(3)**		
FUEL TRANSFER TUBE/REFUELING CANAL	[ ] Gate Valve Closed OR [ ] Water Level Established **(4)**		

(continued on next page)

ATTACHMENT 1
(Page 4 of 5)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

Section 1.0 (continued)

(1) Check the box for the Acceptance Criteria which is satisfied, where applicable.

(2) Mid-Loop Operation Acceptance Criteria:

- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is less than or equal to one hour, THEN:
  - o All obstructions, including hoses and cables, that would affect airlock door closure are removed, except the ramps and interior platform.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, including all hoses and cables."
- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour, THEN:
  - o All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- Air Lock door is capable of being closed PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR by designated personnel.

(3) Movement of irradiated fuel in the containment Acceptance Criteria:

- All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
- A sign is posted stating: "Containment Closure is set for movement of irradiated fuel in containment. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- Air Lock door is capable of being closed within 1 hour by designated personnel.
- Either the Containment Purge System OR the Auxiliary Building Ventilation System taking a suction from the containment atmosphere are operating.

(4) At least 23 feet over the top of the reactor pressure vessel flange as determined by S2.OP-DL.ZZ-0002(Q), Control Room Log - Mode 5, 6 and Defueled.

ATTACHMENT 1
(Page 5 of 5)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

SECTION 2.0

VALVE NUMBER	VALVE NAME	ACCEPTANCE CRITERIA	RESULTS	
			SAT	UNSAT
2VC24	PERSONNEL HATCH TEST CONNECTION	X CAPPED		
2VC25	PERSONNEL HATCH TEST CONNECTION	X CAPPED		
2CA1714	CONT AIR LCK AIR SUP TO SEALS	X		
2CA1715	CONT AIR LCK AIR SUP TO SEALS	X		

ATTACHMENT 2
(Page 1 of 4)

ELECTRICAL PENETRATIONS

PEN NO.	RESULTS		PEN NO.	RESULTS		PEN NO.	RESULTS	
	SAT	UNSAT		SAT	UNSAT		SAT	UNSAT
2-21			2-57			2-28		
2-65			2-17			2-49		
2-43			2-39			2-5		
2-64			2-41			2-50		
2-62			2-18			2-27		
2-58 (1)			2-40			2-63		
2-19			2-61			2-8		
2-47			2-15			2-56		
2-14			2-12			2-11		
2-9			2-34			2-33		
2-31			2-6			2-55 (2)		

Penetrations are ordered right to left, top to bottom, IAW drawing 233901.

Acceptance Criteria:

EXCEPT AS NOTED EACH ELECTRICAL PENETRATION PROVIDING DIRECT ACCESS FROM THE CONTAINMENT ATMOSPHERE TO THE OUTSIDE ATMOSPHERE IS:

- CLOSED AS INDICATED BY ALL PROTECTIVE PANELS INSTALLED

  OR

- THE LOCAL PRESSURE GAUGE IS INDICATING >0 PSIG.

(continued on next page)

ATTACHMENT 2
(Page 2 of 4)

ELECTRICAL PENETRATIONS

(continued)

(1) Penetration 2-58 satisfies at least one of the following criteria:

- A blind flange is installed on at least one side of the penetration, or
- IF the Outage Adapter Flange is installed,
  THEN **ENSURE** at least one of the following criteria is satisfied for each penetration.
  It should be noted, the Outage Adapter Flange may have multiple penetrations:

  A. The associated system is "ADAPTER INSTALLED & IN-SERVICE."
  To be considered "In-Service" the following criteria must be met:

  - Electrical Penetration is intact (electrical adapter installed in the penetration AND sealed).
  - Mechanical Penetration is intact (penetration adapter includes a manual isolation valve installed and connected to hoses, piping, permanent or temporary systems. The penetration and associated components are NOT breached by valve alignment or maintenance activity).

    AND

  - Temporary System or Hose is liquid filled (system is NOT required to be pressurized).

    OR

  - Temporary System is gas filled and pressurized.
    (system pressure must be >0 psig).

  OR

  B. The associated penetration is "ADAPTER INSTALLED & CLOSED".
  To be considered "CLOSED", the penetration isolation valve must be CLOSED.

  OR

  C. The associated system is "CLOSED". To be considered "CLOSED",
  a system must be intact (system piping and components are NOT breached by valve alignment or maintenance activity).

(2) Spare penetration is seal welded, but should be verified INTACT OR CAPPED.

ATTACHMENT 2
(Page 3 of 4)

ELECTRICAL PENETRATIONS

PEN NO.	RESULTS		PEN NO.	RESULTS		PEN NO.	RESULTS	
	SAT	UNSAT		SAT	UNSAT		SAT	UNSAT
2-10			2-51			2- 42		
2-32			2-3 (3)			2-44 (2)		
2-54 (2)			2-25			2-2		
2-59			2-16			2-24		
2-60			2-1			2-46		
2-53			2-23			2-4		
2-13			2-52 (2)			2-26		
2-38			2-7			2-36 (2)		
2-37			2-29			2-22 (2)		
2-45			2-48			2-30 (2)		
2-35			2-20					

Penetrations are ordered right to left, top to bottom, IAW drawing 233901.

Acceptance Criteria:

EXCEPT AS NOTED EACH ELECTRICAL PENETRATION PROVIDING DIRECT ACCESS FROM THE CONTAINMENT ATMOSPHERE TO THE OUTSIDE ATMOSPHERE IS:

- CLOSED AS INDICATED BY ALL PROTECTIVE PANELS INSTALLED

  OR

- THE LOCAL PRESSURE GAUGE IS INDICATING >0 PSIG.

(2) These spare penetrations are seal welded, but should be verified INTACT OR CAPPED.

(3) Penetration 2-3 may NOT indicate >0 psig due to an identified pinhole leak. This leak is evaluated and the disposition for Penetration 2-3 is "use as is" (PIR 00950906548).
Use the alternative Acceptance Criteria for Penetration 2-3.

ATTACHMENT 2
(Page 4 of 4)

ELECTRICAL PENETRATIONS

PENETRATION IDENTIFICATION	RESULTS	
	SAT	UNSAT
100' Airlock Electrical Penetration Left Side		
100' Airlock Electrical Penetration Right Side		
130' Airlock Electrical Penetration Left Side		
130' Airlock Electrical Penetration Right Side		

NOTE: The airlock electrical penetrations are located just above the outer door to the airlocks.

Acceptance Criteria:

EACH ELECTRICAL PENETRATION PROVIDING DIRECT ACCESS FROM THE CONTAINMENT ATMOSPHERE TO THE OUTSIDE ATMOSPHERE IS:

- CLOSED AS INDICATED BY ALL PROTECTIVE PANELS INSTALLED

  OR

- THE LOCAL PRESSURE GAUGE IS INDICATING >0 PSIG.

ATTACHMENT 3
(Page 1 of 2)

CONTAINMENT PRESSURE AND RVLIS LEVEL TRANSMITTERS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION (2)		SAT	UNSAT
M22B	2PT-948D, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN I TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
M23	2PT-948A, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN IV TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
M24B	2PT-948B, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN III TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
M25B	2PT-948C, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN II TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
E30C	2PA-2386, 2 CONT SPRAY WIDE RANGE CONTAINMENT PRESSURE CHANNEL III (ABOVE CONT APD)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		

(1) Circle the Acceptance Criteria which is satisfied.
(2) Instruments are located in Inner Penetration Area, El. 78'.
(3) IF a transmitter is NOT intact,
THEN **INSTALL** a blind flange which satisfies the intent of Technical Specification 3.9.4.c.1
AND **COMPLETE** a section of Attachment 5
AND **NOTIFY** the Control Room to place Bezel Information Tag(s) on the associated containment pressure indicator/RVLIS in the Control Room.
(4) The preferred method of isolation is "Transmitter Intact."

ATTACHMENT 3
(Page 2 of 2)

CONTAINMENT PRESSURE AND RVLIS LEVEL TRANSMITTERS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION (2)		SAT	UNSAT
E54	6521XB, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1311)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6526XB, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1310)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6528XB, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1312)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
E55	6522XD, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1322)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6527XD, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1320)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6529XD, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1321)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
E55C	2PA-2405, 2 CONT SPRAY WIDE RANGE CONTAINMENT PRESSURE CHANNEL IV (ABOVE RVLIS XMITTER PANEL)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		

(1) Circle the Acceptance Criteria which is satisfied.
(2) Instruments are located in Electrical Penetration Area, El. 78'.
(3) IF a transmitter is NOT intact,
THEN **INSTALL** a blind flange which satisfies the intent of Technical Specification 3.9.4.c.1
AND **COMPLETE** a section of Attachment 5
AND **NOTIFY** the Control Room to place Bezel Information Tag(s) on the associated containment pressure indicator/RVLIS in the Control Room.
(4) The preferred method of isolation is "Transmitter Intact."

ATTACHMENT 4
(Page 1 of 10)

MECHANICAL PENETRATIONS

NOTE

A system that is determined to be "In-Service" or "Closed" does NOT provide "direct access from the containment atmosphere to the outside atmosphere." This determination may be based upon any or all of the following:

- System/Component walkdown
- Observation of system instrumentation
- Review of the Component "Off Normal and Off-Normal Tagged" Lists
- Review of maintenance in progress

Utilize this Attachment to record the test results for the Mechanical Penetrations listed in this Attachment 4 by initialing the SAT or UNSAT column using Acceptance Criteria given in Attachment 4 and the following guidance:

- Circle the option used for each penetration,

  - **DETERMINE** if the associated system is "In-Service." To be considered "In-Service" the following criteria must be met:

    - System is intact. (System piping and components are NOT breached by valve alignment or maintenance activity).

      AND

    - System is liquid filled AND either vented OR pressurized. (System may be vented while pressurized in preparation for returning system to service.)

      OR

      System is gas filled and pressurized. (System pressure must be >0 psig).

      AND

    - System is in normal alignment for present plant conditions. (System flow is NOT required).

    OR

(continued on next page)

ATTACHMENT 4
(Page 2 of 10)

MECHANICAL PENETRATIONS

NOTE (continued)

- **DETERMINE** if the associated system is "CLOSED". To be considered "CLOSED", a system must be intact. (System piping and components are NOT breached by valve alignment or maintenance activity).

  OR

- **ISOLATE** the penetration using the associated OUTSIDE VALVE(S) or INSIDE VALVE(S) IAW Attachment (6-74)
  AND **VERIFY** the system is intact within the isolation boundaries. (System piping and components are NOT breached by valve alignment or maintenance activity).

  OR

- **INSTALL** a blind flange which satisfies the intent of Technical Specification 3.9.4.c.1 AND **DESCRIBE** the blind flange installation on Attachment 5.

  OR

- **DETERMINE** if the associated system is "In-Service for LLRT Testing". To be considered "In-Service for LLRT Testing" the following Administrative Controls must be in place:

  - Attachment 69 must be completed to document which penetrations are under LLRT Administrative Control.
  - The breached penetration being tested must be capable of being isolated IAW Attachment 4 OR the applicable LLRT test procedure:
    - During Movement of Irradiated Fuel Within the Containment within ONE HOUR (T/S 3.9.4)
    - During Midloop Operations PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR (UFSAR 5.5.15)
  - The Test Engineer must be available to isolate the breached penetration, if contacted, to establish Containment Closure.
  - When the penetration is unattended, the penetration being tested will be left in the isolated condition IAW Attachment 4 OR the applicable LLRT test procedure.
  - Upon completion of the LLRT, Attachment 69 must be completed to restore the penetration IAW Attachment 4.

ATTACHMENT 4
(Page 3 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M01 M05 M14 M62	21 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS System Piping	CLOSED OR INTACT & ISOLATED IAW ATT. 6A			
M02 M06 M12 M62A	22 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS System Piping	CLOSED OR INTACT & ISOLATED IAW ATT. 6B			
M03 M07 M15 M63	23 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS system Piping	CLOSED OR INTACT & ISOLATED IAW ATT. 6C			
M04 M08 M13 M63A	24 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS System Piping	CLOSED OR INTACT & ISOLATED IAW ATT. 6D			
E22	2VC13/14, BACKUP RMS SAMPLE SUPPLY	CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 7 OR BLIND FLANGE INSTALLED			
E22A	2VC9/10, BACKUP RMS SAMPLE RETURN	CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 8 OR BLIND FLANGE INSTALLED			
E22B	2VC7/8, RMS NORMAL SAMPLE RETURN	CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 9 OR BLIND FLANGE INSTALLED			
E22C	2VC11/12, RMS NORMAL SAMPLE SUPPLY	CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 10 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 4
(Page 4 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (3)
NO.	DESCRIPTION		SAT	UNSAT	
M09	2RH2, RHR SUCTION LINE	IN-SERVICE (2)			
M10	21SJ49, RHR DISCHARGE TO COLD LEG LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 11 OR BLIND FLANGE INSTALLED			
M11	22SJ49, RHR DISCHARGE TO COLD LEG LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 12 OR BLIND FLANGE INSTALLED			
M16	2RH26, RHR HOT LEG INJECTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 13 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) IF this Acceptance Criteria can NOT be satisfied,
THEN IMMEDIATELY **REFER** to TSAS 3.9.8.1.a.

(3) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 4
(Page 5 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M17	2SS901 DEAD WEIGHT TESTER LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 14 OR BLIND FLANGE INSTALLED			
M17A	2CV7, LETDOWN LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 15 OR BLIND FLANGE INSTALLED			
M18	2SS33/104, RCS SAMPLE LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 16 OR BLIND FLANGE INSTALLED			
M18A	2SS49/107, PZR LIQUID SAMPLE LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 17 OR BLIND FLANGE INSTALLED			
M18B	2SS64/110, PZR STEAM SPACE SAMPLE LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 18 OR BLIND FLANGE INSTALLED			
M18C	2PR17/18, PRT TO GAS ANALYZER	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 19 OR BLIND FLANGE INSTALLED			
M18D	2WL96/97, RCDT TO GAS ANALYZER	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 20 OR BLIND FLANGE INSTALLED			
M19	VC PURGE SUPPLY LINE (3)	OPERABLE IAW S2.OP-ST.CBV-0004(Q) OR INTACT & ISOLATED IAW ATT. 21 OR BLIND FLANGE INSTALLED			
M20	VC PURGE EXHAUST LINE (4)	OPERABLE IAW S2.OP-ST.CBV-0004(Q) OR INTACT & ISOLATED IAW ATT. 22 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

(3) May be open to support LCO 3.9.4. Manual closure capability of 2VC1 from the CR is required.

(4) May be open to support LCO 3.9.4. Manual closure capability of 2VC4 from the CR is required.

ATTACHMENT 4
(Page 6 of 10)

MECHANICAL PENETRATIONS

PENETRATION NO.	PENETRATION DESCRIPTION	ACCEPTANCE CRITERIA (1)	RESULTS SAT	RESULTS UNSAT	ATT 69 (2)
M21	2NT25, N2 TO PRT	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 23 OR BLIND FLANGE INSTALLED			
M21A	2WL98/99, RCDT TO VENT HDR	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 24 OR BLIND FLANGE INSTALLED			
M21B	2NT32, N2 TO ACCUMULATORS	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 25 OR BLIND FLANGE INSTALLED			
M22	2DR29, DM TO CONTAINMENT	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 26 OR BLIND FLANGE INSTALLED			
M22A	2WR80, PW TO CONTAINMENT	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 27 OR BLIND FLANGE INSTALLED			
M23A	22CA330, B AIR HDR	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 28 OR BLIND FLANGE INSTALLED			
M23B	2SA591, SA TO UNIT 2 CONTAINMENT	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 29 OR BLIND FLANGE INSTALLED			
M25	2SJ60, SI TEST LINE TO CVCS HUT	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 30 OR BLIND FLANGE INSTALLED			
M25A	2SS27/103, ACCUMULATOR SAMPLE LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 31 OR BLIND FLANGE INSTALLED			
M26	21CV98, 21 SEAL INJECTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 32 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 4
(Page 7 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M26A	22CV98, 22 SEAL INJECTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 33 OR BLIND FLANGE INSTALLED			
M26B	23CV98, 23 SEAL INJECTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 34 OR BLIND FLANGE INSTALLED			
M26C	24CV98, 24 SEAL INJECTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 35 OR BLIND FLANGE INSTALLED			
M27	2WL12/13, RCDT DISCHARGE LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 36 OR BLIND FLANGE INSTALLED			
M28	21SJ44, RHR SUCTION FROM CONTAINMENT SUMP LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 37 OR BLIND FLANGE INSTALLED OR CLOSED			
M29	22SJ44, RHR SUCTION FROM CONTAINMENT SUMP LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 38 OR BLIND FLANGE INSTALLED OR CLOSED			
M32	2CC118, RCP MOTOR INLET FLOW LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 39 OR BLIND FLANGE INSTALLED			
M33	2CC136, RCP MOTOR RETURN LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 40 OR BLIND FLANGE INSTALLED			
M34 M35	2CC113/215, EXCESS LETDOWN LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 41 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 4
(Page 8 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M36	2CV69, CHARGING LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 42 OR BLIND FLANGE INSTALLED			
M37	2CV116, SEAL RETURN HDR	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 43 OR BLIND FLANGE INSTALLED			
M39	2CC131, THERMAL BARRIER RETURN LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 44 OR BLIND FLANGE INSTALLED			
M40	2VC5/6, CONTAINMENT PRESSURE/VACUUM RELIEF LINE	OPERABLE IAW S2.OP-ST.CBV-0004(Q) OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 45 OR BLIND FLANGE INSTALLED			
M41	2SJ135, SI DISCHARGE TO COLD LEG	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 46 OR BLIND FLANGE INSTALLED			
M42	2SJ12/13, COLD LEG INJECTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 47 OR BLIND FLANGE INSTALLED			
M43	21 CS DISCHARGE LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 48 OR BLIND FLANGE INSTALLED			
M44	22 CS DISCHARGE LINE	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 49 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 4
(Page 9 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M45	2WL16/17, CONTAINMENT SUMP DISCHARGE LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 50 OR BLIND FLANGE INSTALLED			
M46 M51	25SW58/72, SW SUPPLY TO/RETURN FROM 25 CFCU	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 51 OR BLIND FLANGE INSTALLED			
M47 M52	24SW58/72, SW SUPPLY TO/RETURN FROM 24 CFCU	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 52 OR BLIND FLANGE INSTALLED			
M48 M53	23SW58/72, SW SUPPLY TO/RETURN FROM 23 CFCU	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 53 OR BLIND FLANGE INSTALLED			
M49 M54	21SW58/72, SW SUPPLY TO/RETURN FROM 21 CFCU	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 54 OR BLIND FLANGE INSTALLED			
M50 M55	22SW58/72, SW SUPPLY TO/RETURN FROM 22 CFCU	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 55 OR BLIND FLANGE INSTALLED			
M56	21CA330, A AIR HDR	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 56 OR BLIND FLANGE INSTALLED			
M56A	2CS900/902, SAMPLE LINE	INTACT & ISOLATED IAW ATT. 57 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 4
(Page 10 of 10)

MECHANICAL PENETRATIONS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M57	2FP147, FP TO CONTAINMENT	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 58 OR BLIND FLANGE INSTALLED			
M60	ECCS RELIEF LINE TO CONTAINMENT SUMP	CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 59 OR BLIND FLANGE INSTALLED			
M61	2SA268/270, CONTAINMENT PRESSURE TEST LINE	INTACT & ISOLATED IAW ATT. 60 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M61A	2SA265/267, CONTAINMENT PRESSURE TEST LINE	INTACT & ISOLATED IAW ATT. 61 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M61B	2SA262/264, CONTAINMENT PRESSURE TEST LINE	INTACT & ISOLATED IAW ATT. 62 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M66	2SF22/2WL191, RWPP CANAL SUCTION LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 63 OR BLIND FLANGE INSTALLED			
M66A	2SF36/2WL190, RWPP TO CANAL LINE	IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 64 OR BLIND FLANGE INSTALLED			
M70	22SJ40, SI DISCHARGE TO HOT LEG	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 65 OR BLIND FLANGE INSTALLED			
M71	21SJ40, SI DISCHARGE TO HOT LEG	IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 66 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.

(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 5
(Page 1 of 1)

BLIND FLANGE INSTALLATION DESCRIPTIONS

1. Penetration No:_____ Work Order No(s).____

   Installation description:_____

2. Penetration No:_____ Work Order No(s).____

   Installation description:_____

3. Penetration No:_____ Work Order No(s).____

   Installation description:_____

4. Penetration No:_____ Work Order No(s).____

   Installation description:_____

5. Penetration No:_____ Work Order No(s).____

   Installation description:_____

6. Penetration No:_____ Work Order No(s).____

   Installation description:_____

ATTACHMENT 6A
(Page 1 of 2)

21 BREACHED STEAM GENERATOR CLOSURE

21 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
21MS18 (1)	MS STOP BYP VALVE		X		
21MS167 (1)	MS ISOL VALVE		GX		
21MS130 (8)	SG HDR PRESS TAP		X		
21MS45	21 SG TO AFP TURB STOP VLV		X		
21MS131 (2)(8)	SG HDR PRESS TAP		Transmitter Installed (9) OR X		
21MS8 (2)(8)	MS HDR PRESS TEST		Transmitter Installed (9) OR X		
21MS199	MS SV HEAT STOP VALVE		X		
21MS11 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
21MS12 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
21MS13 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
21MS14 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
21MS15 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		

(1) Valve is operated from the Control Room.
(2) Permanently installed pressure transmitter may be used as isolation boundary in lieu of valve. (circle the "X" OR "Transmitter Installed" used for isolation).
(3) If maintenance is NOT being performed on the valve, valve is considered CLOSED.
(8) IF the valve is used for isolation, **NOTIFY** the Control Room that the associated transmitter(s) is inoperable AND to **PLACE** Bezel Information Tag(s) on the associated SG pressure indicator(s) in the Control Room. Reference Technical Specification 3.7.2.
(9) The preferred method of isolation is "Transmitter Installed."

ATTACHMENT 6A
(Page 2 of 2)

21 BREACHED STEAM GENERATOR CLOSURE

21 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
21MS146	MS HDR TEST VALVE		X		
21MS6	MS S/U DR STOP V		X		
21BF22 (1)	MAIN FEED ISOL VALVE		X		
21AF129	AF TO 21 S/G VENT		X		
21AF132	AF TO 21 S/G DRAIN		X		
21AF23 (12)	S/G AF INLET STOP CHECK		X		
21GB4 (1) (5) (13) OR [21GB3 AND 21GB190]	SG B/D OUTLET ISOL VALVE		X (10)		
21SS94 (1) OR 21SS93 (4)	SG B/D SAMP ISOL V		X		
21GB47 (6)	S/G BLOWDOWN LINE N2 SUP VALVE		X OR N/A (11)		
21MS10 (1) OR 21MS9 (7)	RELIEF VALVE MS PWR RELIEF STOP VALVE		X		

(1) Valve is operated from the Control Room.
(4) Valve is operated from the Primary Sample Room. Sample isolation may be accomplished using SS93 OR SS94 (circle the valve used for isolation).
(5) GB4 and/or GB190 may be opened to permit draining a steam generator provided GB4 is capable of being operated from the Control Room AND a level indication is maintained on the Steam Generator Wide Range level.
(6) When the GB4 is used for Containment Closure, GB47 may be opened for Chemical Addition IAW S2.CH-AD.CN-1144(Q), provided the DR supply valve to the chemical addition rig is opened first.
(7) Isolation may be accomplished using MS9 OR MS10 (circle the valve used for isolation).
(10) Isolation may be accomplished using [GB3 AND GB190] OR GB4 (circle the valve(s) used for isolation).
(11) Required to be closed when GB4 is used for Containment Closure. N/A when GB3 and GB190 are used for Containment Closure. Circle X or N/A as applicable).
(12) 21AF23 may be opened to fill 21 Steam Generator utilizing the Auxiliary Feedwater System.
(13) 21GB4 may be opened to support the performance of Local Leak Rate Testing (LLRT).

ATTACHMENT 6B
(Page 1 of 2)

22 BREACHED STEAM GENERATOR CLOSURE

22 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
22MS18 (1)	MS STOP BYP VALVE		X		
22MS167 (1)	MS ISOL VALVE		GX		
22MS130 (8)	SG HDR PRESS TAP		X		
22MS131 (2)(8)	SG HDR PRESS TAP		Transmitter Installed (9) OR X		
22MS8 (2)(8)	MS HDR PRESS TEST		Transmitter Installed (9) OR X		
22MS199	MS SV HEAT STOP VALVE		X		
22MS11 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
22MS12 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
22MS13 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
22MS14 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
22MS15 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		

(1) Valve is operated from the Control Room.
(2) Permanently installed pressure transmitter may be used as isolation boundary in lieu of valve. (circle the "X" OR "Transmitter Installed" used for isolation).
(3) If maintenance is NOT being performed on the valve, valve is considered CLOSED.
(8) IF the valve is used for isolation, **NOTIFY** the Control Room that the associated transmitter(s) is inoperable AND to **PLACE** Bezel Information Tag(s) on the associated SG pressure indicator(s) in the Control Room. Reference Technical Specification 3.7.2.
(9) The preferred method of isolation is "Transmitter Installed."

ATTACHMENT 6B
(Page 2 of 2)

22 BREACHED STEAM GENERATOR CLOSURE

22 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
22MS146	MS HDR TEST VALVE		X		
22MS6	MS S/U DR STOP V		X		
22BF22 (1)	MAIN FEED ISOL VALVE		X		
22AF23 (12)	S/G AF INLET STOP CHECK		X		
22GB4 (1) (5) (13) OR [22GB3 AND 22GB190]	SG B/D OUTLET ISOL VALVE		X (10)		
22SS94 (1) OR 22SS93 (4)	SG B/D SAMP ISOL V		X		
22GB47 (6)	S/G BLOWDOWN LINE N2 SUP VALVE		X OR N/A (11)		
22MS10 (1) OR 22MS9 (7)	RELIEF VALVE MS PWR RELIEF STOP VALVE		X		

(1) Valve is operated from the Control Room.
(4) Valve is operated from the Primary Sample Room. Sample isolation may be accomplished using SS93 OR SS94 (circle the valve used for isolation).
(5) GB4 and/or GB190 may be opened to permit draining a steam generator provided GB4 is capable of being operated from the Control Room AND a level indication is maintained on the Steam Generator Wide Range level.
(6) When the GB4 is used for Containment Closure, GB47 may be opened for Chemical Addition IAW S2.CH-AD.CN-1144(Q), provided the DR supply valve to the chemical addition rig is opened first.
(7) Isolation may be accomplished using MS9 OR MS10 (circle the valve used for isolation).
(10) Isolation may be accomplished using [GB3 AND GB190] OR GB4 (circle the valve(s) used for isolation).
(11) Required to be closed when GB4 is used for Containment Closure. N/A when GB3 and GB190 are used for Containment Closure. Circle X or N/A as applicable.
(12) 22AF23 may be opened to fill 22 Steam Generator utilizing the Auxiliary Feedwater System.
(13) 22GB4 may be opened to support the performance of Local Leak Rate Testing (LLRT).

ATTACHMENT 6C
(Page 1 of 2)

23 BREACHED STEAM GENERATOR CLOSURE

23 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
23MS18 (1)	MS STOP BYP VALVE		X		
23MS167 (1)	MS ISOL VALVE		GX		
23MS130 (8)	SG HDR PRESS TAP		X		
23MS45	23 SG TO AFP TURB STOP VLV		X		
23MS131 (2)(8)	SG HDR PRESS TAP		Transmitter Installed (9) OR X		
23MS8 (2)(8)	MS HDR PRESS TEST		Transmitter Installed (9) OR X		
23MS199	MS SV HEAT STOP VALVE		X		
23MS11 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
23MS12 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
23MS13 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
23MS14 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
23MS15 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		

(1) Valve is operated from the Control Room.
(2) Permanently installed pressure transmitter may be used as isolation boundary in lieu of valve. (circle the "X" OR "Transmitter Installed" used for isolation).
(3) If maintenance is NOT being performed on the valve, valve is considered CLOSED.
(8) IF the valve is used for isolation, **NOTIFY** the Control Room that the associated transmitter(s) is inoperable AND to **PLACE** Bezel Information Tag(s) on the associated SG pressure indicator(s) in the Control Room. Reference Technical Specification 3.7.2.
(9) The preferred method of isolation is "Transmitter Installed."

ATTACHMENT 6C
(Page 2 of 2)

23 BREACHED STEAM GENERATOR CLOSURE

23 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
23MS146	MS HDR TEST VALVE		X		
23MS6	MS S/U DR STOP V		X		
23BF22 (1)	MAIN FEED ISOL VALVE		X		
23AF129	AF TO 23 S/G VENT		X		
23AF23 (12)	S/G AF INLET STOP CHECK		X		
23GB4 (1) (5) (13) OR [23GB3 AND 23GB190]	SG B/D OUTLET ISOL VALVE		X (10)		
23SS94 (1) OR 23SS93 (4)	SG B/D SAMP ISOL V		X		
23GB47 (6)	S/G BLOWDOWN LINE N2 SUP VALVE		X OR N/A (11)		
23MS10 (1) OR 23MS9 (7)	RELIEF VALVE MS PWR RELIEF STOP VALVE		X		

(1) Valve is operated from the Control Room.
(4) Valve is operated from the Primary Sample Room. Sample isolation may be accomplished using SS93 OR SS94 (circle the valve used for isolation).
(5) GB4 and/or GB190 may be opened to permit draining a steam generator provided GB4 is capable of being operated from the Control Room AND a level indication is maintained on the Steam Generator Wide Range level.
(6) When the GB4 is used for Containment Closure, GB47 may be opened for Chemical Addition IAW S2.CH-AD.CN-1144(Q), provided the DR supply valve to the chemical addition rig is opened first.
(7) Isolation may be accomplished using MS9 OR MS10] (circle the valve used for isolation).
(10) Isolation may be accomplished using [GB3 AND GB190] OR GB4(circle the valve(s) used for isolation).
(11) Required to be closed when GB4 is used for Containment Closure. N/A when GB3 and GB190 are used for Containment Closure. Circle X or N/A as applicable.
(12) 23AF23 may be opened to fill 23 Steam Generator utilizing the Auxiliary Feedwater System.
(13) 23GB4 may be opened to support the performance of Local Leak Rate Testing (LLRT).

ATTACHMENT 6D
(Page 1 of 2)

24 BREACHED STEAM GENERATOR CLOSURE

24 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
24MS18 (1)	MS STOP BYP VALVE		X		
24MS167 (1)	MS ISOL VALVE		GX		
24MS130 (8)	SG HDR PRESS TAP		X		
24MS131 (2)(8)	SG HDR PRESS TAP		Transmitter Installed (9) OR X		
24MS8 (2)(8)	MS HDR PRESS TEST		Transmitter Installed (9) OR X		
24MS199	MS SV HEAT STOP VALVE		X		
24MS11 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
24MS12 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
24MS13 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
24MS14 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		
24MS15 (3)	MS ATM RELIEF VALVE		X OR Blind Flange Installed		

(1) Valve is operated from the Control Room.
(2) Permanently installed pressure transmitter may be used as isolation boundary in lieu of valve. (circle the "X" OR "Transmitter Installed" used for isolation).
(3) If maintenance is NOT being performed on the valve, valve is considered CLOSED.
(8) IF the valve is used for isolation, **NOTIFY** the Control Room that the associated transmitter(s) is inoperable AND to **PLACE** Bezel Information Tag(s) on the associated SG pressure indicator(s) in the Control Room. Reference Technical Specification 3.7.2.
(9) The preferred method of isolation is "Transmitter Installed."

ATTACHMENT 6D
(Page 2 of 2)

24 BREACHED STEAM GENERATOR CLOSURE

24 STEAM GENERATOR

VALVE NUMBER	VALVE NAME	AS FOUND	REQUIRED POSITION	INITS	IV
24MS146	MS HDR TEST VALVE		X		
24MS6	MS S/U DR STOP V		X		
24BF22 (1)	MAIN FEED ISOL VALVE		X		
24AF23 (12)	S/G AF INLET STOP CHECK		X		
24GB4 (1) (5) (13) OR [24GB3 AND 24GB190]	SG B/D OUTLET ISOL VALVE		X (10)		
24SS94 (1) OR 24SS93 (4)	SG B/D SAMP ISOL V		X		
24GB47 (6)	S/G BLOWDOWN LINE N2 SUP VALVE		X OR N/A (11)		
24MS10 (1) OR 24MS9 (7)	RELIEF VALVE MS PWR RELIEF STOP VALVE		X		

(1) Valve is operated from the Control Room.
(4) Valve is operated from the Primary Sample Room. Sample isolation may be accomplished using SS93 OR SS94 (circle the valve used for isolation).
(5) GB4 and/or GB190 may be opened to permit draining a steam generator provided GB4 is capable of being operated from the Control Room AND a level indication is maintained on the Steam Generator Wide Range level.
(6) When the GB4 is used for Containment Closure, GB47 may be opened for Chemical Addition IAW S2.CH-AD.CN-1144(Q), provided the DR supply valve to the chemical addition rig is opened first.
(7) Isolation may be accomplished using MS9 OR MS10 (circle the valve used for isolation).
(10) Isolation may be accomplished using [GB3 AND GB190] OR GB4 (circle the valve(s) used for isolation).
(11) Required to be closed when GB4 is used for Containment Closure. N/A when GB3 and GB190 are used for Containment Closure. Circle X or N/A as applicable.
(12) 24AF23 may be opened to fill 24 Steam Generator utilizing the Auxiliary Feedwater System.
(13) 24GB4 may be opened to support the performance of Local Leak Rate Testing (LLRT).

ATTACHMENT 7
(Page 1 of 1)

2VC13/14 BACKUP RMS SAMPLE SUPPLY

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22	2VC14*,**	RMS SAMPLE SUCTION VLV		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22	2VC13*,**	RMS SAMPLE SUCT VLV		X		

* Valve is operated from the Control Room.

** IF open,
THEN **ENSURE** APD 2R11/12 Sample Pump is stopped from Control Room Panel 2RP1 prior to closing valves.

ATTACHMENT 8
(Page 1 of 1)

2VC9/10 BACKUP RMS SAMPLE RETURN

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22A	2VC10*,**	RMS SAMPLE DISCHARGE VLV		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22A	2VC9*,**	RMS SAMPLE DISCHARGE VLV		X		

* Valve is operated from the Control Room.

** IF open,
THEN **ENSURE** APD 2R11/12 Sample Pump is stopped from Control Room Panel 2RP1 prior to closing valves.

ATTACHMENT 9
(Page 1 of 1)

2VC7/8 RMS NORMAL SAMPLE RETURN

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22B	2VC8*, **	RMS SAMPLE OUTLET VLV		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22B	2VC7*, **	RMS SAMPLE OUTLET VLV		X		

* Valve is operated from the Control Room.

** IF open,
THEN **ENSURE** APD 2R11/12 Sample Pump is stopped from Control Room Panel 2RP1 prior to closing valves.

ATTACHMENT 10
(Page 1 of 1)

2VC11/12 RMS NORMAL SAMPLE SUPPLY

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22C	2VC12*, **	RMS SAMPLE INLET VLV		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
E22C	2VC11*, **	RMS SAMPLE INLET VLV		X		

* Valve is operated from the Control Room.

** IF open,
THEN **ENSURE** APD 2R11/12 Sample Pump is stopped from Control Room Panel 2RP1 prior to closing valves.

ATTACHMENT 11
(Page 1 of 1)

21SJ49 RHR DISCHARGE TO COLD LEG

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M10	21SJ49*	RHR DISCH TO COLD LEGS		X		

* Valve is operated from the Control Room.

ATTACHMENT 12
(Page 1 of 1)

22SJ49 RHR DISCHARGE TO COLD LEG LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M11	22SJ49*	RHR DISCH TO COLD LEGS		X		
	2SJ330	SI LOW HDR DRAIN		X		

* Valve is operated from the Control Room.

ATTACHMENT 13
(Page 1 of 1)

2RH26 RHR HOT LEG INJECTION LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M16	21RH19*	RHR HX DISCH X-CONN VALVE		X		
	22RH19*	RHR HX DISCH X-CONN VALVE		X		
	2RH20*	RHR HX BYP VALVE		X		
	2RH21	RHR TO RWST STOP VALVE		X		
	2RH24	DM WTR TO RHR SYS		X		
	21RH40	RHR DISCH EQUAL VALVE		X		
	22RH40	RHR DISCH EQUAL VALVE		X		
	2RH22	RHR FLOW TAP		X		
	2RH23	RHR FLOW TAP		X		
	2RH41	RHR DISCH EQUAL VALVE		X		
	2RH46**	2 RHR DM WTR TO RHR SYS CHECK VALVE		INTACT		
	2RH58	RHR DRN		X		
	2RH72	RHR VENT		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M16	2RH26*	HOT LEG ISOL VALVE		X		
	2RH47	RHR TEST VENT		X		
	2RH25**	2 RHR 21 TO PZR RLF TK SAF RLF VLV		INTACT		

* Valve is operated from the Control Room.
** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 14
(Page 1 of 1)

2SS901 DEAD WEIGHT TESTER LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M17	2SS901	PZR DEADWEIGHT CALIB TR IV		X		

ATTACHMENT 15
(Page 1 of 1)

2CV7 LETDOWN LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M17A	2CV7*	LTDWN HX INLET VALVE		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M17A	2CV3*	LTDWN ORIFICE ISOL VALVE		X		
	2CV4*	LTDWN ORIFICE ISOL VALVE		X		
	2CV5*	LTDWN ORIFICE ISOL VALVE		X		
	2CV6**	2 CVC REG HT EX TO LETDOWN HT EX LNE SAF RLF VLV		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 16
(Page 1 of 1)

2SS33/104 RCS SAMPLE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18	2SS33*	RC SAMP HDR ISOL V		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18	2SS104*	RC SAMP HDR ISOL V		X		

* Valve is operated from the Control Room.

ATTACHMENT 17
(Page 1 of 1)

2SS49/107 PZR LIQUID SAMPLE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18A	2SS49*	PZR LIQ SAMP ISOL V		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18A	2SS107*	PZR LIQ SAMP HDR ISOL V		X		

* Valve is operated from the Control Room.

ATTACHMENT 18
(Page 1 of 1)

2SS64/110 PZR STEAM SPACE SAMPLE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18B	2SS64*	PZR STM SAMP ISOL V		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18B	2SS110*	PZR STM SAMP HDR ISOL V		X		

* Valve is operated from the Control Room.

ATTACHMENT 19
(Page 1 of 1)

2PR17/18 PRT TO GAS ANALYZER

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18C	2PR18*	PRT GAS SAMP V		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18C	2PR17*	PRT GAS SAMP V		X		

* Valve is operated from the Control Room.

ATTACHMENT 20
(Page 1 of 1)

2WL96/97 RCDT TO GAS ANALYZER

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18D	2WL97*	RCDT TO GAS ANALYZER		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M18D	2WL96*	RCDT TO GAS ANALYZER		X		

* Valve is operated from the Control Room.

ATTACHMENT 21
(Page 1 of 1)

VC PURGE SUPPLY LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M19	2VC1*	CONT PURGE SUPPLY ISOL VLV		X		
	2VC917	CONT VENT TEST VLV		X		

* Valve is operated from the Control Room.

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE AND BLIND FLANGE.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M19	2VCF2	CONT PURGE SUPPLY ISO BLIND FLANGE		INSTALLED		
	2VC901	CONT VENT ISOL V TEST V		X		

ATTACHMENT 22
(Page 1 of 1)

2VC3/4 PURGE EXHAUST LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M20	2VC4*	CONT PURGE EXHAUST ISOL VLV		X		
	2VC916	CONT VENT TEST VLV		X		

* Valve is operated from the Control Room.

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE AND BLIND FLANGE.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M20	2VCF3	CONT PURGE EXHAUST ISO BLIND FLANGE		INSTALLED		
	2VC900	CONT VEN ISOL V TEST V		X		

ATTACHMENT 23
(Page 1 of 1)

2NT25 N2 TO PRT

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M21	2NT25*	PRT N2 SUP V		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M21	2NT45	PRT N2 SUP TEST CONN		X		
	2NT46	PRT N2 SUP TEST CONN		X		
	2NT47	PRT N2 SUP STOP V		X		
	2NT26**	2 REACT COOL PZR RLF TK NITROGEN SUPPLY LINE CHECK		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 24
(Page 1 of 1)

2WL98/99 RCDT TO VENT HDR

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M21A	2WL99*	RCDT TO VENT HDR		X		
	2WL108*	N2 SUPPLY TO RCDT		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M21A	2WL98*	RCDT TO VENT HDR		X		

* Valve is operated from the Control Room.

ATTACHMENT 25
(Page 1 of 1)

2NT32 N2 TO ACCUMULATORS

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M21B	2NT32*	ACCUM N2 SUP V		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M21B	2NT35*	ACCUM N2 VENT		X		
	2NT55	ACCUM N2 SUP TEST V		X		
	2NT56	ACCUM N2 SUP TEST VALVE		X		
	2NT33**	2 SAFETY INJ BOTTLED H.P. N2 TO ACCUMULATORS SAF RLF VLV		INTACT		
	2NT34**	2 SAFETY INJ BOTTLED H.P. N2 TO ACCUMULATORS CHECK VLV		INTACT		
	21SJ93*	ACCUMULATOR N2 STOP VALVE		X		
	22SJ93*	ACCUMULATOR N2 STOP VALVE		X		
	23SJ93*	ACCUMULATOR N2 STOP VALVE		X		
	24SJ93*	ACCUMULATOR N2 STOP VALVE		X		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 26
(Page 1 of 2)

2DR29 DM TO CONTAINMENT

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M22	2DR29*	DM WTR SUPP TO CONT IV		X		
	2DR915	DM WTR SYS ISOL TEST VALVE		X		

* Valve is operated from the Control Room.

OR

(CONTINUED)

ATTACHMENT 26
(Page 2 of 2)

2DR29 DM TO CONTAINMENT

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M22	2DR31	DR HEADER HOSE CONNECTION		X		
	2DR32	DR HEADER HOSE CONN		X		
	2DR33	DR HEADER HOSE CONNECTION		X		
	2DR34	DR HEADER HOSE CONNECTION		X		
	2DR50	DR HEADER HOSE CONNECTION		X		
	2DR51	DR HEADER HOSE CONNECTION		X		
	2DR52	DR HEADER HOSE CONNECTION		X		
	2DR53	DR HEADER HOSE CONNECTION		X		
	2DR54	DR HEADER HOSE CONNECTION		X		
	2DR55	DR HEADER HOSE CONNECTION		X		
	2DR56	DR HEADER HOSE CONNECTION		X		
	2DR57	DR HEADER HOSE CONNECTION		X		
	2DR58	DR HEADER HOSE CONNECTION		X		
	2DR59	DR HEADER HOSE CONNECTION		X		
	2DR30**	2 DEMIN WTR REACT CONTMT INLET LINE CKVL		INTACT		
	2DR177**	OVERPRESSURE PROTECTION RELIEF VALVE		INTACT		

* Valve is operated from the Control Room.
** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 27
(Page 1 of 1)

2WR80 PW TO CONTAINMENT

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M22A	2WR80*	PW TO CONTMT STOP VALVE		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M22A	2WR82*	PW TO PRT		X		
	2WR96	CONTMT PW HDR TEST		X		
	2WR97	CONTMT PW HDR TEST		X		
	2WR125	CONTMT PW HDR DRN		X		
	2WR126	CONTMT PW HDR DRN		X		
	21WR62*	PW TO RCP HD TK STOP VALVE		X		
	22WR62*	PW TO RCP HD TK STOP VALVE		X		
	23WR62*	PW TO RCP HD TK STOP VALVE		X		
	24WR62*	PW TO RCP HD TK STOP VALVE		X		
	2WR81**	2 REACT COOL PZR RLF TK PRIMARY WTR SUPPLY LINE CHECK VLV		INTACT		

* Valve is operated from the Control Room.
** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 28
(Page 1 of 1)

22CA330 B AIR HDR

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M23A	22CA330*	CONT SUP INLET VALVE		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M23A	2CA548	2B HDR TEST V		X		
	22CA545	2B HDR TEST V		X		
	22CA546	2B HDR ISOL VALVE		X		
	22CA360**	22 CA HDR 2B CONT RETURN CK		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 29
(Page 1 of 1)

2SA591 SA TO UNIT 2 CONTAINMENT

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M23B	2SA591	SA HDR CONT ISOL SPECTACLE PLATE		X		
	2SA905	SA HDR TEST CON VALVE		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M23B	2SA120	SA HDR CONT PRESS SUP VALVE		X		
	2SA121	SA HDR SV		X		
	2SA272	SA HDR TEST CON V		X		
	2SA119**	2 STAT AIR CONTAINMENT ISLN CHECK VLV		INTACT		

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 30
(Page 1 of 1)

2SJ60 SI TEST LINE TO CVCS HUT

- Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M25	2SJ53*	SI HDR TEST STOP VALVE		X		
	2SJ60*	ACCUMULATOR CV TEST LINE STOP V		X		
	2SJ212	SI HDR TEST LINE VENT		X		
	2SJ332	ACCUM CV TEST HDR DRN		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M25	2SJ123*	ACCUMULATOR CV TEST LINE STOP V		X		
	2SJ368	ACCUM CV TEST HDR DR V		X		

* Valve is operated from the Control Room.

ATTACHMENT 31
(Page 1 of 1)

2SS27/103 ACCUMULATOR SAMPLE LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M25A	2SS27*	ACCUM SAMP HDR ISOL V		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M25A	2SS103*	ACCUM SAMP HDR ISOL V		X		

* Valve is operated from the Control Room.

ATTACHMENT 32
(Page 1 of 1)

21CV98 21 SEAL INJECTION LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26	21CV98	RCP SW FLOW ADJ VALVE		X		
	21CV318	SEAL WTR INJ DRN		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26	21CV291	TEST CONN SW SUP		X		
	21CV293	TEST CONN SW SUP		X		
	21CV295	21 RCP SEAL INJECTION ISOL VLV		X		
	21CV99**	21 CVC RCP SEAL WTR INJ SUPPLY CHECK VLV		INTACT		

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 33
(Page 1 of 1)

22CV98 22 SEAL INJECTION LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26A	22CV98	RCP SW FLOW TAP ADJ VALVE		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26A	22CV291	TEST CONN SW SUP		X		
	22CV293	TEST CONN SW SUP		X		
	22CV295	22 RCP SEAL INJECTION ISOL VLV		X		
	22CV99**	22 CVC RCP SEAL WTR INJ SUPPLY LINE CHECK VLV		INTACT		

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 34
(Page 1 of 1)

23CV98 23 SEAL INJECTION LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26B	23CV98	RCP SW FLOW ADJ VALVE		X		
	23CV318	SEAL WTR INJ DRN		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26B	23CV291	TEST CONN SW SUP		X		
	23CV293	TEST CONN SW SUP		X		
	23CV295	23 RCP SEAL INJECTION ISOL VLV		X		
	23CV99**	23 CVC RCP SEAL WTR INJ SUPPLY LINE CHECK VLV		INTACT		

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 35
(Page 1 of 1)

24CV98 24 SEAL INJECTION LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26C	24CV98	RCP SW FLOW ADJ VALVE		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M26C	24CV291	TEST CONN SW SUP		X		
	24CV293	TEST CONN SW SUP		X		
	24CV295	24 RCP SEAL INJECTION ISOL VLV		X		
	24CV99**	24 CVC RCP SEAL WTR INJ SUPPLY LINE CHECK VLV		INTACT		

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 36
(Page 1 of 1)

2WL12/13 RCDT DISCHARGE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M27	2WL13*	RCDT DISCH ISOL VALVE		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M27	2WL476**	OVERPRESSURE PROTECTION RELIEF VALVE		INTACT		
	2WL12*	RC DRAIN PUMP ISO VALVE		X		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 37
(Page 1 of 2)

21SJ44 RHR SUCTION FROM CONTAINMENT SUMP LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M28	21SJ44*	CONT SUMP SUCT VALVE		X		
	21SJ146**	CONTMT SUMP SUCT TEST CONN		X		

* Valve is operated from the Control Room.

** If bolted hatch is closed, valve position may be verified in accordance with SAP WCM.

OR

OUTSIDE CONTAINMENT EQUIPMENT					
PEN NUMBER	**EQUIPMENT DESCRIPTION**	**AS FOUND**	**REQUIRED CONDITION**	**INITS**	**IV**
M28	21 RHR PUMP		** INTACT		

** Equipment with Acceptance Criteria listed as INTACT are considered part of the pressure boundary and are NOT considered isolation points.

(CONTINUED)

ATTACHMENT 37
(Page 2 of 2)

21SJ44 RHR SUCTION FROM CONTAINMENT SUMP LINE

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M28	21RH4	RHR PUMP SUCT VALVE		X		
	21RH36	RHR SUCT EQUAL VALVE		X		
	2RH77	RHR DRN		X		
	21RH10	RHR PUMP DISCH STOP VALVE		X		
	21RH37	RHR DISCH EQUAL VALVE		X		
	21RH29	RHR PUMP MIN FLOW VALVE		X		
	21RH55	RHR PUMP SEAL VENT		X		
	21RH34	RHR PUMP DRN		X		
	21RH7	RHR PUMP DRN		X		
	21RH30	RHR PUMP SUCT PRESS TAP		X		
	21RH11	RHR PUMP DISCH PRESS TAP		(1)		
	21RH31	RHR PUMP FLOW TAP		(1)		
	21RH32	RHR PUMP FLOW TAP		(1)		
	21RH35	RHR PUMP DISCH PRESS TAP		(2)		
	21SJ146 (3)	CONTMT SUMP SUCT TEST CONN		X		
	21SJ147	CONTMT SUMP SUCT TEST VENT		LX		
	21SJ96	CONTMT SUMP LINE FLUSH VALVE		LX		

(1) Transmitter installed (preferred) OR Valve CLOSED

(2) Gauge installed OR Valve CLOSED

(3) Valves may be considered closed if bolted hatch has NOT been opened since last verification.

ATTACHMENT 38
(Page 1 of 2)

22SJ44 RHR SUCTION FROM CONTAINMENT SUMP LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M29	22SJ44*	CONT SUMP SUCT VALVE		X		
	22SJ146**	CONTMT SUMP SUCT TEST CONN		X		

* Valve is operated from the Control Room.

** If bolted hatch is closed, valve position may be verified in accordance with SAP WCM.

OR

OUTSIDE CONTAINMENT EQUIPMENT					
PEN NUMBER	**EQUIPMENT DESCRIPTION**	**AS FOUND**	**REQUIRED CONDITION**	**INITS**	**IV**
M29	22 RHR PUMP		INTACT **		

** Equipment with Acceptance Criteria listed as INTACT are considered part of the pressure boundary and are NOT considered isolation points.

(CONTINUED)

ATTACHMENT 38
(Page 2 of 2)

22SJ44 RHR SUCTION FROM CONTAINMENT SUMP LINE

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M29	22RH4	RHR PMP SUCT VALVE		X		
	22RH36	RHR SUCT EQUAL V		X		
	2RH78	RHR DRN		X		
	22RH10	RHR PUMP DISCH STOP VALVE		X		
	22RH37	RHR DISCH EQUAL VALVE		X		
	22RH29	RHR PUMP MIN FLOW VALVE		X		
	22RH55	RHR PUMP SEAL VENT		X		
	22RH34	RHR PUMP DRN		X		
	22RH7	RHR PUMP DRN		X		
	22RH30	RHR PUMP SUCT PRESS TAP		X		
	22RH11	RHR PUMP DISCH PRESS TAP		(1)		
	22RH31	RHR PUMP FLOW TAP		(1)		
	22RH32	RHR PUMP FLOW TAP		(1)		
	22RH35	RHR PUMP DISCH PRESS TAP		(2)		
	22SJ146 (3)	CONTMT SUMP SUCT TEST CONN		X		
	22SJ147	CONTMT SUMP SUCT TEST VENT		LX		
	22SJ96	CONTMT SUMP LINE FLUSH VALVE		LX		

(1) Transmitter installed (preferred) OR Valve CLOSED

(2) Gauge installed OR Valve CLOSED

(3) Valves may be considered closed if bolted hatch has NOT been opened since last verification.

ATTACHMENT 39
(Page 1 of 1)

2CC118 RCP MOTOR INLET FLOW LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M32	2CC118*	RCP CC MOT OP INLET VALVE		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M32	2CC183	RCP CC INLET HDR TEST V		X		
	2CC184	RCP CC INLET HDR TEST V		X		
	2CC294	RCP CC SUP VENT		X		
	2CC307	2R RCP CC SUP DR VALVE		X		
	2CC308	24 RCP CC SUP VENT		X		
	21CC120	21 RCP CC INLET V		X		
	22CC120	22 RCP CC INLET V		X		
	23CC120	23 RCP CC INLET V		X		
	24CC120	24 RCP CC INLET V		X		
	2CC119**	2 CC RCP BRG & SEAL SPLY CKVL		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 40
(Page 1 of 1)

2CC136 RCP MOTOR RETURN LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M33	2CC136*	RCP BRG MOT OP OUTLET VALVE		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M33	2CC185	RCP MOT CC RET HDR TEST V		X		
	2CC242	22 RCP MOT CC RET VENT		X		
	2CC279	RCP MOT RET HDR VENT		X		
	2CC280	RCP MOT RET HDR DR V		X		
	2CC301	24 RCP MOT CC RET VENT		X		
	2CC302	24 RCP MOT CC RET DR V		X		
	21CC127	21 RCP MOT CC OUTLET V		X		
	22CC127	22 RCP MOT CC OUTLET V		X		
	23CC127	23 RCP MOT CC OUTLET V		X		
	24CC127	24 RCP MOT CC OUTLET V		X		
	2CC187*, **	RCP MOTOR CC MOTOR OPERATED OUTLET VLV		INTACT		
	2CC186**	2 CC RCP LWR SEAL RET HDR MOV BYP CHECK VLV		INTACT		
	2CC135**	2 CC RCP UPR BRG OUT HDR SAF RLF VLV		INTACT		

* Valve is operated from the Control Room.
** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 41
(Page 1 of 1)

2CC113/215 EXCESS LETDOWN LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M34 M35	2CC113*	EXCESS LETDOWN HX CC OUTLET V		X		
	2CC215*	EXCESS LETDOWN HX CC INLET VLV		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M34 M35	2CC110	EXCESS LETDOWN HX CC DRN VLV		X		
	2CC179	EXC LTDWN INLET TEST VALVE		X		
	2CC180	EXC LTDWN OUTLET TEST V		X		
	2CC205	EXCESS LETDOWN HX CC VENT		X		
	2CC274	CC TO EXCESS LTDWN HX HDR VENT		X		
	2CC275	CC TO EXCESS LTDWN HX HDR DR V		X		
	2CC278	CC FROM EXC LTDWN HX HDR VENT		X		
	2CC109**	2 CC EXCESS LTDN HTEX INLET CK		INTACT		
	2CC112**	2 CMPNT CLG EXCESS LETDOWN HT EXCHG OUTLET SAF RLF VLV		INTACT		

* Valve is operated from the Control Room.
** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 42
(Page 1 of 1)

2CV69 CHARGING LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M36	2CV69*	CHG HDR MOT OPER STOP VALVE		X		
	2CV288	TEST CONN VALVE CHG LINE		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M36	2CV75*	PZR AUX SPRAY STOP VALVE		X		
	2CV77*	23 LOOP CHG LINE STOP VALVE		X		
	2CV79*	24 LOOP CHG LINE STOP VALVE		X		
	2CV272	23 LOOP CHG LINE BYP VALVE		X		
	2CV290	TEST CONN VALVE CHG LINE		X		
	2CV74**	2 CVC CHG SFTY INJ TO REG HT EX INLT CHCK VLV		INTACT		
	2CVE24***	2 CVC REGENERATIVE HT EXCHG		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

*** **ENSURE** Heat Exchanger (2CVE24) is INTACT on Charging line side.

ATTACHMENT 43
(Page 1 of 2)

2CV116 SEAL RETURN HDR

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M37	2CV116*	RCP SW RET HDR STOP VALVE		X		
	2CV335	RCP SW RET HDR DRN		X		

* Valve is operated from the Control Room.

OR

(CONTINUED)

ATTACHMENT 43
(Page 2 of 2)

2CV116 SEAL RETURN HDR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M37	2CV114*	RCP SEAL BYPASS STOP VALVE		X		
	2CV134*	EXC LTDWN 3 WAY VALVE		RCDT		
	2CV284*, **	RCP SW RET HDR STOP VALVE		INTACT		
	2CV336	DRN SEAL WTR RET		X		
	2CV338	EXCESS LTDWN DRN		X		
	2CV360	23 SEAL WTR RET VENT		X		
	21CV107	RCP SW FM OUTLET VALVE		X		
	22CV107	RCP SW FM OUTLET VALVE		X		
	23CV107	RCP SEAL WTR FM OUTLET VALVE		X		
	24CV107	RCP SW FM OUTLET VALVE		X		
	21CV108	RCP SW FM BYP VALVE		X		
	22CV108	RCP SW FM BYP VALVE		X		
	23CV108	RCP SW FM BYP VALVE		X		
	24CV108	RCP SW FM BYP VALVE		X		
	2CV296**	2 CVC RCP SEAL WTR INJ RETURN STOP MOV 2CV296 RECIRC LINE CKVL		INTACT		
	2CV115**	2 CVC RCP SEAL WTR INJ RETURN HEADER TO PZR RLF TK SAF RLF VLV		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 44
(Page 1 of 2)

2CC131 THERMAL BARRIER RETURN LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M39	2CC131*	RCP THERM BAR CC CONT VALVE		X		

* Valve is operated from the Control Room.

OR

(CONTINUED)

ATTACHMENT 44
(Page 2 of 2)

2CC131 THERMAL BARRIER RETURN LINE

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M39	2CC189	RCP THERM BAR CC RET HDR TEST		X		
	2CC283	RCP THERM BAR CC RET HDR VENT		X		
	2CC285	RCP THERM BAR CC RET HDR DR V		X		
	2CC287	RCP THERM BAR CC RET HDR VENT		X		
	2CC303	24 RCP THERM BAR CC RET VENT		X		
	2CC305	24 RCP THERM BAR CC RET DR V		X		
	21CC130	21 RCP THERM BAR CC OUTLET V		X		
	22CC130	22 RCP THERM BAR CC OUTLET V		X		
	23CC130	23 RCP THERM BAR CC OUTLET V		X		
	24CC130	24 RCP THERM BAR CC OUTLET V		X		
	2CC190*, **	RCP THERM BAR CC OUTLET V		INTACT		
	2CC208**	2 CC RCP THERM BARR RTN HDR MOV BYP CHK VLV		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 45
(Page 1 of 1)

2VC5/6 CONT PRESSURE/VACUUM RELIEF LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M40	2VC5*	CONT VENT ISO DAMPER		X		
	2VC918	CONT VENT TEST VLV		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M40	2VC6*	PRESS-VAC RELIEF ISOLATION		X		
	2VC902	CONT VENT V TEST V		X		

* Valve is operated from the Control Room.

ATTACHMENT 46
(Page 1 of 2)

2SJ135 SI DISCHARGE TO COLD LEG

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M41	2SJ135*	SJ DISCH TO COLD LEGS VALVE		X		

* Valve is operated from the Control Room.

OR

(CONTINUED)

ATTACHMENT 46
(Page 2 of 2)

2SJ135 SI DISCHARGE TO COLD LEG

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

NOTE

The OUTSIDE CONTAINMENT VALVE should be used to isolate Penetration M41. The SJ143 valves are throttled IAW S2.OP-ST.SJ-0012(Q) and should only be closed as a last resort to establish containment isolation.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M41	2SJ158*	TEST LINE STOP V		X		
	2SJ214	COLD LEG SI HDR VENT		X		
	21SJ141	COLD LEG SI TEST FLOW TAP		X		
	22SJ141	COLD LEG SI TEST FLOW TAP		X		
	23SJ141	COLD LEG SI TEST FLOW TAP		X		
	24SJ141	COLD LEG SI TEST FLOW TAP		X		
	21SJ142	COLD LEG SI TEST FLOW TAP		X		
	22SJ142	COLD LEG SI TEST FLOW TAP		X		
	23SJ142	COLD LEG SI TEST FLOW TAP		X		
	24SJ142	COLD LEG SI TEST FLOW TAP		X		
	21SJ143	SI TO COLD LEG THROT V		X		
	22SJ143	SI TO COLD LEG THROT V		X		
	23SJ143	SI TO COLD LEG THROT V		X		
	24SJ143	SI TO COLD LEG THROT V		X		

* Valve is operated from the Control Room.

ATTACHMENT 47
(Page 1 of 2)

2SJ12/13 COLD LEG INJECTION LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M42	2SJ12	BIT OUTLET VALVE		X		
	2SJ13	BIT OUTLET VALVE		X		
	2SJ309	BIT OUTLET DRN		X		

OR

(CONTINUED)

ATTACHMENT 47
(Page 2 of 2)

2SJ12/13 COLD LEG INJECTION LINE

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M42	2SJ166	TEST LINE STOP VALVE		X		
	2SJ149	CHG SI HDR TEST CONN		X		
	2SJ150**	2 SAFETY INJ BORON INJ TK TO COLD LEG CHECK VLV		INTACT		
	2SJ19	CHG SI DHR ACCUM FILL V		X		
	2SJ311	BIT OUTLET VENT		X		
	21SJ14	CHG SI FLOWTAP		X		
	22SJ14	CHG SI FLOWTAP		X		
	23SJ14	CHG SI FLOWTAP		X		
	24SJ14	CHG SI FLOWTAP		X		
	21SJ15	CHG SI FLOWTAP		X		
	22SJ15	CHG SI FLOWTAP		X		
	23SJ15	CHG SI FLOWTAP		X		
	24SJ15	CHG SI FLOWTAP		X		
	21SJ388	21 COLD LEG SI HDR STOP VLV		X		
	22SJ388	22 COLD LEG SI HDR STOP VLV		X		
	23SJ388	23 COLD LEG SI HDR STOP VLV		X		
	24SJ388	24 COLD LEG SI HDR STOP VLV		X		

ATTACHMENT 48
(Page 1 of 1)

21 CS DISCHARGE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M43	21CS2*	CS PUMP MOT OP DISCH VALVE		X		
	21CS10	SPRAY HDR AIR TEST		X		
	21CS36	RHR CS STOP VALVE		X		
	21CS46	RCS CS STOP VALVE		X		
	21CS51	CS DISCH HDR DRN		X		
	21CS47	EQUALIZING VALVE		X		
	21CS52	CS DISCH HDR TEST VENT		X		
	2CS60	2 CS DISCH HDR DRN		X		
	21CS4**	21 CONT SPRAY PMP DISCH INBD CHECK VLV		INTACT		
	21CS5**	21 CONT SPRAY PMP DISCH SAF RLF VLV		INTACT		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M43	21CS6	SPRAY HEADER ISOLATION VALVE		X		
	21CS44	CS HDR FLOW TEST		X		
	21CS49	CS DISCH HDR TEST CONN		X		
	21CS67	CONT SPRAY HEADER DRAIN VALVE		X		
	21CS48**	21 CONT SPRAY PMP DISCH OUTBD CHECK VLV		INTACT		

* Valve is operated from the Control Room.
** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 49
(Page 1 of 1)

22 CS DISCHARGE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M44	22CS2*	CS PMP MOT OP DISCH V		X		
	22CS10	SPRAY DHR AIR TEST		X		
	22CS36	RHR CS STOP VALVE		X		
	22CS46	CS HDR VENT		X		
	22CS47	EQUALIZING VALVE		X		
	22CS52	CS DISCH HDR TEST VENT		X		
	22CS4**	22 CSP DISCH INBD CHECK VLV		INTACT		
	22CS5**	22 CSP DISCH SAF RLF VLV		INTACT		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M44	22CS6	SPRAY HEADER ISOLATION VALVE		X		
	22CS44	CS HDR FLOW TEST		X		
	22CS49	CS DISCH HDR TEST CONN		X		
	22CS67	CONT SPRAY HEADER DRAIN VALVE		X		
	22CS48**	22 CSP DISCH OUTBD CHECK VLV		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 50
(Page 1 of 1)

2WL16/17 CONTAINMENT SUMP DISCHARGE LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M45	2WL17*	CONTMT SUMP PUMP DISCH INLET VALVE		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M45	2WL478**	OVERPRESURE PROTECTION RELIEF VALVE		INTACT		
	2WL16*	CONTMT SUMP PUMP DISCH INLET VALVE		X		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 51
(Page 1 of 1)

25SW58/72 SW SUPPLY TO/RETURN FROM 25 CFCU

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M46 M51	25SW58*	25 CFCU SW INLET VALVE		JACKED CLOSED		
	25SW72*	25 CFCU SW OUTLET VALVE		JACKED CLOSED		

* Requires 25 CFCU C/T

ATTACHMENT 52
(Page 1 of 1)

24SW58/72 SW SUPPLY TO/RETURN FROM 24 CFCU

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M47 M52	24SW58*	24 CFCU SW INLET VALVE		JACKED CLOSED		
	24SW72*	24 CFCU SW OUTLET VALVE		JACKED CLOSED		

* Requires 24 CFCU C/T

ATTACHMENT 53
(Page 1 of 1)

23SW58/72 SW SUPPLY TO/RETURN FROM 23 CFCU

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M48 M53	23SW58*	23 CFCU SW INLET VALVE		JACKED CLOSED		
	23SW72*	23 CFCU SW OUTLET VALVE		JACKED CLOSED		

* Requires 23 CFCU C/T

ATTACHMENT 54
(Page 1 of 1)

21SW58/72 SW SUPPLY TO/RETURN FROM 21 CFCU

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M49 M54	21SW58*	CV FANS SW INLET VALVE		JACKED CLOSED		
	21SW72*	21 CFCU SW OUTLET VALVE		JACKED CLOSED		

* Requires 21 CFCU C/T

ATTACHMENT 55
(Page 1 of 1)

22SW58/72 SW SUPPLY TO/RETURN FROM 22 CFCU

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M50 M55	22SW58*	CV FANS SW INLET VALVE		JACKED CLOSED		
	22SW72*	CV FANS SW OUTLET VALVE		JACKED CLOSED		

* Requires 22 CFCU C/T

ATTACHMENT 56
(Page 1 of 1)

21CA330 A AIR HDR

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M56	21CA330*	CONT SUP INLET VALVE		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M56	2CA549	2A HDR TEST VALVE		X		
	21CA545	2A HDR TEST VALVE		X		
	21CA546	2A HDR ISOL VALVE		X		
	21CA360**	21 CA HDR 2A CONT RETURN CK		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 57
(Page 1 of 1)

2CS900/902 SAMPLE LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVE.

OUTSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M56A	2CS902	PRESS TAP		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M56A	2CS900	PRESS TAP		X		
	2CS901	PRESS TAP		X		

ATTACHMENT 58
(Page 1 of 1)

2FP147 FP TO CONTAINMENT

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M57	2FP147*	FP CONTAINMENT IV		X		
	2FP928	CONT. SUPPLY LINE DRN VLV		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M57	2FP275	CONTAINMENT INLET VALVE		X		
	2FP361	CONT INLET VLV TEST CONN		X		
	2FP148**	2 FIRE PROT REAC CONTMT INLET CHK VLV		INTACT		

* Valve is operated from the Control Room.

** Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 59
(Page 1 of 1)

ECCS RELIEF LINE TO CONTAINMENT SUMP

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	VALVE NUMBER	DESCRIPTION	AS FOUND	REQUIRED POSITION	INITS	IV
M60	2PR36	RV HDR DR V		X		
	2PR40	RV HDR VENT		X		
	2PR41	RV HDR DR V		X		
	2CS64	CS RELIEF LINE DRN		X		
	21CS5*	21 CONT SPRAY PMP DISCH SAF RLF VLV		INTACT		
	22CS5*	22 CSP DISCH SAF RLF VLV		INTACT		
	2CV309	DISCH DRN FOR CHG SUCT REL V		X		
	2CV365	CHG SUCT HDR REL VENT		X		
	2CV43*	2 CVC CHG SAFETY INJ PMP SUCT HEADER SAF RLF VLV		INTACT		
	2SJ229	LOW HD SI RV DISCH DRN		X		
	2SJ293	LOW HD SI RV DISCH VENT		X		
	2SJ32*	2 SAFETY INJ HDR SAF RLF VLV FOR PMPS SUCT HDR		INTACT		
	21SJ39*	21 SAFETY INJ SAF RLF VLV ON PMP 21 DISCH HDR		INTACT		
	22SJ39*	22 SAFETY INJ PMP 22 DISCH HDR SAF RLF VLV		INTACT		
	21SJ48*	21 SAFETY INJ SAF RLF VLV FOR RHR DISCH TO COLD LEG HDR		INTACT		
	22SJ48*	22 SAFETY INJ LOW HEAD SAF RLF VLV		INTACT		
	2SJ167*	2 SAFETY INJ COLD LEG LINE SAF RLF VLV		INTACT		

* Valves with Acceptance Criteria listed as INTACT are considered part of the pressure boundary, and are NOT considered isolation valves.

ATTACHMENT 60
(Page 1 of 1)

2SA268/270 CONTAINMENT PRESSURE TEST LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M61	2SA268	CONT PRESS TEST LINE IV		X		
	2SA269	CONT PRESS TEST LINE TEST V		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M61	2SA270	CONT PRESS TEST LINE IV		X		

ATTACHMENT 61
(Page 1 of 1)

2SA265/267 CONTAINMENT PRESSURE TEST LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M61A	2SA265	CONT PRESS TEST LINE IV		X		
	2SA266	CONT PRESS TEST LINE TEST V		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M61A	2SA267	CONT PRESS TEST LINE IV		X		

ATTACHMENT 62
(Page 1 of 1)

2SA262/264 CONTAINMENT PRESSURE TEST LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M61B	2SA262	CONT PRS TEST LINE IV		X		
	2SA263	CONT PRESS TEST LINE TEST V		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M61B	2SA264	CONT PRESS TEST LINE IV		X		

ATTACHMENT 63
(Page 1 of 1)

2SF22/2WL191 RWPP CANAL SUCTION LINE

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M66	2SF22	RWPP SUCT VALVE FUEL X-FER CANAL		X		
	2SF73	FROM X-FER CANAL TEST CONN		X		

OR

♦ Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M66	2WL191	RX CAVITY DRN		X		

ATTACHMENT 64
(Page 1 of 1)

2SF36/2WL190 RWPP TO CANAL LINE

- Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M66A	2SF36	RWPP OUTLET V-FUEL X-FER CANAL		X		
	2SF76	TO X-FER CANAL TEST CONN		X		

OR

- Containment Closure established using INSIDE CONTAINMENT VALVE.

INSIDE CONTAINMENT VALVE						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M66A	2WL190	RX CAVITY DRN		X		

ATTACHMENT 65
(Page 1 of 2)

22SJ40 SI DISCHARGE TO HOT LEG

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M70	22SJ40*	SI HEADER STOP VALVE		X		
	22SJ145	HOT LEG SI TEST CONN		X		
	2SJ194	SI DISCH TO HOT LEG VENT		X		
	2SJ344	SI HOT LEG HDR DRAIN		X		

* Valve is operated from the Control Room.

OR

(CONTINUED)

ATTACHMENT 65
(Page 2 of 2)

22SJ40 SI DISCHARGE TO HOT LEG

- Containment Closure established using INSIDE CONTAINMENT VALVES.

NOTE

The OUTSIDE CONTAINMENT VALVES should be used to isolate Penetration M70. 21SJ138 and 22SJ138 are throttled IAW S2.OP-ST.SJ-0012(Q) and should only be closed as a last resort to establish containment isolation.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M70	2SJ159*	TEST LINE STOP V		X		
	2SJ250	HOT LEG SI VENT		X		
	2SJ252	HOT LEG SI DR V		X		
	21SJ136	HOT LEG SI TEST FLOW TAP		X		
	22SJ136	HOT LEG SI TEST FLOW TAP		X		
	21SJ137	HOT LEG SI TEST FLOW TAP		X		
	22SJ137	HOT LEG SI TEST FLOW TAP		X		
	21SJ138	SI TO HOT LEG THROT V		X		
	22SJ138	SI TO HOT LEG THROT V		X		

* Valve is operated from the Control Room.

ATTACHMENT 66
(Page 1 of 2)

21SJ40 SI DISCHARGE TO HOT LEG

♦ Containment Closure established using OUTSIDE CONTAINMENT VALVES.

OUTSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M71	21SJ40*	SJ HDR STOP VLV		X		
	2SJ338	SI HOT LEG HDR DRN		X		
	2SJ340	SI HOT LEG HDR VENT		X		
	21SJ145	HOT LEG SI TES CONN		X		

* Valve is operated from the Control Room.

OR

(CONTINUED)

ATTACHMENT 66
(Page 2 of 2)

21SJ40 SI DISCHARGE TO HOT LEG

♦ Containment Closure established using INSIDE CONTAINMENT VALVES.

NOTE

The OUTSIDE CONTAINMENT VALVES should be used to isolate Penetration M71. 23SJ138 and 24SJ138 are throttled IAW S2.OP-ST.SJ-0012(Q) and should only be closed as a last resort to establish containment isolation.

INSIDE CONTAINMENT VALVES						
PEN NUMBER	**VALVE NUMBER**	**DESCRIPTION**	**AS FOUND**	**REQUIRED POSITION**	**INITS**	**IV**
M71	2SJ63*	SI HDR ACCUM FILL V		X		
	2SJ248	HOT LEG SI VENT		X		
	2SJ216	HOT LEG SI DR V		X		
	23SJ136	HOT LEG SI TEST FLOW TAP		X		
	24SJ136	HOT LEG SI TEST FLOW TAP		X		
	23SJ137	HOT LEG SI TEST FLOW TAP		X		
	24SJ137	HOT LEG SI TEST FLOW TAP		X		
	23SJ138	SI TO HOT LEG THROT VALVE		X		
	24SJ138	SI TO HOT LEG THROT VALVE		X		

* Valve is operated from the Control Room.

ATTACHMENT 67A
(Page 1 of 8)

OUTAGE EQUIPMENT HATCH

NOTE

An Outage Equipment Hatch Penetration that is determined to be "Adapter installed & In-Service" or "Adapter Installed & Closed" does NOT provide "direct access from the containment atmosphere to the outside atmosphere." This determination may be based upon a walkdown of each penetration for the following:

- Mechanical System Adapter installed in the penetration with a manual isolation valve (Open for In-Service)
- Mechanical System Adapter installed in the penetration with a manual isolation valve (Closed if Out of Service)
- Electrical Adapter installed in the penetration AND Sealed

Utilize this Attachment to record the test results for the Outage Equipment Hatch Door, and Spare Penetrations listed in this Attachment 67A by initialing the SAT or UNSAT column using Acceptance Criteria AND the following guidance:

- Circle the option used for each penetration,

1. **DETERMINE** if the associated system is "ADAPTER INSTALLED & IN-SERVICE." To be considered "In-Service" the following criteria must be met:

   - Electrical Penetration is intact. (Electrical Adapter installed in the penetration AND sealed)
   - Mechanical Penetration is intact. (Penetration Adapter includes a manual isolation valve installed and connected to hoses, piping, per manent or temporary systems. The penetration and associated com ponents are NOT breached by valve alignment or maintenance activity).

     AND

   - Temporary System or Hose is liquid filled. (System is NOT required to be pressurized).

     OR

     Temporary System is gas filled and pressurized. (System pressure must be >0 psig).

   OR

2. **DETERMINE** if the associated penetration is "ADAPTER INSTALLED & CLOSED". To be considered "CLOSED", the penetration isolation valve must be CLOSED.

   OR

3. **VERIFY** a "BLIND FLANGE IS INSTALLED" which satisfies the intent of Technical Specification 3.9.4.c.1 is installed.

   OR

4. **DETERMINE** if the associated system is "CLOSED". To be considered "CLOSED", a system must be intact. (System piping and com ponents are NOT breached by valve alignment or maintenance activity).

ATTACHMENT 67A
(Page 2 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION		SAT	UNSAT
Door	Outage Equipment Hatch Access Door	☐ SECURED IN PLACE WITH ALL 10 BOLTS INSTALLED OR ☐ OPENED DURING **MID-LOOP OPERATIONS** provided the following requirements are satisfied: • OEH Door is capable of being closed PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR by designated personnel. • A designated OEH closure team is readily available to close the OEH door during midloop operation IAW SC.MD-FR.CAN-0001(Q). • Equipment necessary for door closure is pre-staged for easy access. • IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is less than or equal to one hour, THEN: o All obstructions, including hoses and cables, that would affect OEH door closure are removed, except the ramps and interior platform. o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, including all hoses and cables." • IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour, THEN: o All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect OEH door closure are removed. Hoses and cables running through the OEH shall employ a means to allow safe, quick isolation and disconnection. o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect." (continued on next page)		

(1) **CHECK** the box for the Acceptance Criteria which is applicable.

ATTACHMENT 67A
(Page 3 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION		SAT	UNSAT
Door	Outage Equipment Hatch Access Door	(continued) OR ☐ OPENED DURING **MOVEMENT OF IRRADIATED FUEL IN CONTAINMENT** AND CAPABLE OF BEING SECURED IN PLACE WITH ALL 10 BOLTS INSTALLED WITHIN 1 HOUR IAW SC.MD-FR.CAN-0001(Q) and the following requirements are satisfied: • A designated OEH closure team is readily available to close the OEH door during movement of irradiated fuel within the containment IAW SC.MD-FR.CAN-0001(Q). • Equipment necessary for door closure is pre-staged for easy access. • All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect OEH door closure are removed. Hoses and cables running through the OEH shall employ a means to allow safe, quick isolation and disconnection. • A sign is posted stating: "Containment Closure is set for movement of irradiated fuel in containment. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect." • Either the Containment Purge System OR the Auxiliary Building Ventilation System taking a suction from the containment atmosphere are operating.		

(1) **CHECK** the box for the Acceptance Criteria which is applicable.

ATTACHMENT 67A
(Page 4 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.(*)	DESCRIPTION		SAT	UNSAT
1.5A	1 ½" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
1A	1" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
4A	4" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
3B	3" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
4B	4" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		

(*) Penetrations are numbered from Bottom to Top. See Exhibit 1 for location identification.
(1) Circle the Acceptance Criteria which is satisfied.

ATTACHMENT 67A
(Page 5 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.(*)	DESCRIPTION		SAT	UNSAT
3A	3" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
12A	12" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
6A	6" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
6B	6" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		

(*) Penetrations are numbered from Bottom to Top. See Exhibit 1 for location identification.

(1) Circle the Acceptance Criteria which is satisfied.

ATTACHMENT 67A
(Page 6 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.(*)	DESCRIPTION		SAT	UNSAT
12B	12" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
12C	12" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
12E	12" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
10A	10" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
12D	12" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		

(*) Penetrations are numbered from Bottom to Top. See Exhibit 1 for location identification.

(1) Circle the Acceptance Criteria which is satisfied.

ATTACHMENT 67A
(Page 7 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.(*)	DESCRIPTION		SAT	UNSAT
6C	6" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
6D	6" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
4C	4" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
3C	3" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
4D	4" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
3D	3" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		

(*) Penetrations are numbered from Bottom to Top. See Exhibit 1 for location identification.

(1) Circle the Acceptance Criteria which is satisfied.

ATTACHMENT 67A
(Page 8 of 8)

OUTAGE EQUIPMENT HATCH

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.(*)	DESCRIPTION		SAT	UNSAT
1.5B	1 ½" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		
1B	1" PENETRATION	BLIND FLANGE INSTALLED OR CLOSED OR ADAPTER INSTALLED & IN-SERVICE OR ADAPTER INSTALLED & CLOSED		

(*) Penetrations are numbered from Bottom to Top. See Exhibit 1 for location identification.

(1) Circle the Acceptance Criteria which is satisfied.

The OEH is installed and inspected IAW requirements SC.MD-FR.CAN-0001(Q). This will ensure valves and other hardware for services passing through the Outage Equipment Hatch penetrations are NOT physically supported by the OEH.

OEH Closure Test Results from SC.MD-FR.CAN-0001(Q):

Date: _____ Actual Test Time: _____ Acceptance Time: _____

OEH Closure "Acceptance Time" is determined IAW the following:

- During Movement of Irradiated Fuel Within the Containment the time requirement to establish Containment Closure is within ONE HOUR (T/S 3.9.4)
- During Midloop Operations the time requirement to establish Containment Closure is PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR (UFSAR 5.5.15)

Personnel responsible for Containment Closure are notified, IAW SC.MD-FR.CAN-0001(Q), that Containment Closure is established AND requirements of SC.MD-FR.CAN-0001(Q) must be maintained. **[70047185]**

Maintenance Supervisor _____ Date _____ **[80019433]**

ATTACHMENT 67B
(Page 1 of 3)
EQUIPMENT HATCH VENTILATION BARRIER (EHVB)

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION		SAT	UNSAT
Door	Equipment Hatch Ventilation Barrier (EHVB)	☐ CLOSED IAW SC.MD-FR.CAN-0002(Q). OR ☐ OPENED DURING **MID-LOOP OPERATIONS** provided the following requirements are satisfied: • EHVB is capable of being closed PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR by designated personnel. • A designated EHVB closure team is readily available to close the EHVB during midloop operation IAW SC.MD-FR.CAN-0002(Q). • Equipment necessary for EHVB closure is pre-staged for easy access. • IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is less than or equal to one hour, THEN: o All obstructions, including hoses and cables, that would affect EHVB closure are removed, except the ramps and interior platform. o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, including all hoses and cables." • IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour, THEN: o All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect EHVB closure are removed. Hoses and cables running through the EHVB shall employ a means to allow safe, quick isolation and disconnection. o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect." (continued on next page)		

(1) **CHECK** the box for the Acceptance Criteria which is applicable.

ATTACHMENT 67B
(Page 2 of 3)
EQUIPMENT HATCH VENTILATION BARRIER (EHVB)

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION		SAT	UNSAT
Door	Equipment Hatch Ventilation Barrier (EHVB)	(continued) OR OPENED DURING **MOVEMENT OF IRRADIATED FUEL IN CONTAINMENT** AND CAPABLE OF BEING CLOSED WITHIN 1 HOUR IAW SC.MD-FR.CAN-0002(Q), and the following requirements are satisfied: • A designated EHVB closure team is readily available to close the EHVB during movement of irradiated fuel within the containment IAW SC.MD-FR.CAN-0002(Q). • Equipment necessary for EHVB closure is pre-staged for easy access. • All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect EHVB closure are removed. Hoses and cables running through the EHVB shall employ a means to allow safe, quick isolation and disconnection. • A sign is posted stating: "Containment Closure is set for movement of irradiated fuel in containment. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect." • Either the Containment Purge System OR the Auxiliary Building Ventilation System taking a suction from the containment atmosphere are operating.		

(1) **CHECK** the box for the Acceptance Criteria which is applicable.

ATTACHMENT 67B
(Page 3 of 3)

EQUIPMENT HATCH VENTILATION BARRIER (EHVB)

The Equipment Hatch Ventilation Barrier (EHVB) is installed and inspected IAW requirements SC.MD-FR.CAN-0002(Q).

Equipment Hatch Ventilation Barrier (EHVB) Closure Test Results from SC.MD-FR.CAN-0002(Q):

Date: _____ Actual Test Time: _____ Acceptance Time: _____

Equipment Hatch Ventilation Barrier (EHVB) Closure "Acceptance Time" is determined IAW the following:

- During Movement of Irradiated Fuel Within the Containment the time requirement to establish Containment Closure is within ONE HOUR (T/S 3.9.4)
- During Midloop Operations the time requirement to establish Containment Closure is PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR (UFSAR 5.5.15)

Personnel responsible for Containment Closure are notified, IAW SC.MD-FR.CAN-0002(Q), that Containment Closure is established AND requirements of SC.MD-FR.CAN-0002(Q) must be maintained. **[70047185]**

Maintenance Supervisor _____ Date _____ **[80019433]**

ATTACHMENT 68
(Page 1 of 2)

COMPLETION SIGN-OFF SHEET

1.0 **COMMENTS**:(Include test deficiencies and corrective actions.)

ATTACHMENT 68
(Page 2 of 2)

COMPLETION SIGN-OFF SHEET

2.0 **SIGNATURES**:

Print	Initials	Signature	Date

INDEPENDENT VERIFICATION:

3.0 **SM/CRS FINAL REVIEW AND APPROVAL**:

This procedure with Attachments 1 - 4, 5 - 67 (as applicable), and 68 is reviewed for completeness and accuracy. All deficiencies, including the corrective actions, are clearly recorded in the COMMENTS Section of this attachment. Technical Specification compliance, procedure compliance, and Acceptance Criteria are evaluated. **[C0283]**

Signature:_____ Date:_____
SM/CRS

ATTACHMENT 69
(Page 1 of 1)
PENETRATION CLOSURE STATUS CHANGE REQUEST

ADDENDUM TO ATTACHMENT # 1 __ 2 __ 3 __ 4 __

1.0 **DOCUMENT** the appropriate information in the following table for the penetration closure barrier to be changed.

1.1 **COMPLETE** a new Attachment 5 - 67 for the affected penetration, AND **ATTACH** to this form to support the barrier change.

1.2 **DOCUMENT** the appropriate Attachment 1 through 4 Acceptance Criteria used below:

NEW CONTAINMENT CLOSURE BARRIER ACCEPTANCE CRITERIA			
AFFECTED ATTACHMENT (Attachment 5 - 67)	**PENETRATION NUMBER/ IDENTIFICATION**	**RESULTS**	
		SAT	**UNSAT**
Acceptance Criteria from associated Att. 1, 2, 3 or 4			

1.3 Reason for change _____

_____

1.4 **SIGNATURES**:

Print	Initials	Signature	Date/Time
_____	_____	_____	_____

INDEPENDENT VERIFICATION:

_____ _____ _____ _____

2.0 **SM/CRS FINAL REVIEW AND APPROVAL**:

This Addendum is reviewed for completeness and accuracy. This change in Penetration Barriers ensures ongoing compliance with Surveillance requirements. Technical Specifications compliance, procedure compliance, and Acceptance Criteria are evaluated. **[C0283]**

Signature:_____ Date:_____
SM/CRS

3.0 **ATTACH** to current Surveillance for record purposes.

ATTACHMENT 70
(Page 1 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

1.0 EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

EQUIPMENT	ACCEPTANCE CRITERIA (1)	RESULTS	
		SAT	UNSAT
INNER EQUIP HATCH	[ ] Inner Equipment Hatch installed and held in place by a minimum of four bolts OR [ ] Outage Equipment Hatch in place by all 20 bolts installed, AND SAT IAW ATT. 67A OR [ ] Equipment Hatch Ventilation Barrier (EHVB) is installed, AND SAT IAW ATT. 67B		
100 FT EL CONT AIR LOCK	[ ] A minimum of one door is closed OR [ ] BOTH Airlock doors may be opened during **Mid-Loop Operation**, provided the following acceptance criteria is satisfied: **(2)** OR [ ] BOTH Airlock doors may be opened during **movement of irradiated fuel in the containment**, provided the following acceptance criteria is satisfied: **(3)**		

(continued on next page)

ATTACHMENT 70
(Page 2 of 22)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

1.0 (continued)

(1) Check the box for the Acceptance Criteria which is satisfied, where applicable.

(2) Mid-Loop Operation Acceptance Criteria:

- ♦ IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is less than or equal to one hour, THEN:
  - o All obstructions, including hoses and cables, that would affect airlock door closure are removed, except the ramps and interior platform.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, including all hoses and cables."
- ♦ IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour, THEN:
  - o All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- ♦ Air Lock door is capable of being closed PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR by designated personnel.

(3) Movement of irradiated fuel in the containment Acceptance Criteria:

- ♦ All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
- ♦ A sign is posted stating: "Containment Closure is set for movement of irradiated fuel in containment. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- ♦ Air Lock door is capable of being closed within 1 hour by designated personnel.
- ♦ Either the Containment Purge System OR the Auxiliary Building Ventilation System taking a suction from the containment atmosphere are operating.

ATTACHMENT 70
(Page 3 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

1.0 (continued)

EQUIPMENT	ACCEPTANCE CRITERIA (1)	RESULTS	
		SAT	UNSAT
130 FT EL CONT AIR LOCK	[ ] A minimum of one door is closed OR [ ] BOTH Airlock doors may be opened during **Mid-Loop Operation**, provided the following acceptance criteria is satisfied: (2) OR [ ] BOTH Airlock doors may be opened during **movement of irradiated fuel in the containment**, provided the following acceptance criteria is satisfied: (3)		
FUEL TRANSFER TUBE/REFUELING CANAL	[ ] Gate Valve Closed OR [ ] Water Level Established (4)		

(continued on next page)

ATTACHMENT 70
(Page 4 of 22)

EQUIPMENT DOORS, AIR LOCKS, AND REFUELING CANAL

1.0 (continued)

(1) Check the box for the Acceptance Criteria which is satisfied, where applicable.

(2) Mid-Loop Operation Acceptance Criteria:

- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is less than or equal to one hour,
  THEN:
  - o All obstructions, including hoses and cables, that would affect airlock door closure are removed, except the ramps and interior platform.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, including all hoses and cables."
- IF the time to ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR is greater than one hour,
  THEN:
  - o All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
  - o A sign is posted stating: "Containment Closure is set for Mid-Loop Operation. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- Air Lock door is capable of being closed PRIOR TO THE ONSET OF CORE BOILING FOLLOWING A LOSS OF RHR by designated personnel.

(3) Movement of irradiated fuel in the containment Acceptance Criteria:

- All obstructions, with the exception of ramps, interior platform, and hoses/cables capable of quick isolation and disconnect, that would affect airlock door closure are removed. Hoses and cables running through the airlocks shall employ a means to allow safe, quick isolation and disconnection.
- A sign is posted stating: "Containment Closure is set for movement of irradiated fuel in containment. Door closure areas must be maintained clear of all obstructions, except hoses and cables capable of quick isolation and disconnect."
- Air Lock door is capable of being closed within 1 hour by designated personnel.
- Either the Containment Purge System OR the Auxiliary Building Ventilation System taking a suction from the containment atmosphere are operating.

(4) At least 23 feet over the top of the reactor pressure vessel flange as determined by S2.OP-DL.ZZ-0002(Q), Control Room Log - Mode 5, 6 and Defueled.

ATTACHMENT 70
(Page 5 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

1.0 (continued)

VALVE NUMBER	VALVE NAME	ACCEPTANCE CRITERIA	RESULTS	
			SAT	UNSAT
2VC24	PERSONNEL HATCH TEST CONNECTION	X CAPPED		
2VC25	PERSONNEL HATCH TEST CONNECTION	X CAPPED		
2CA1714	CONT AIR LCK AIR SUP TO SEALS	X		
2CA1715	CONT AIR LCK AIR SUP TO SEALS	X		

SEVEN DAY SURVEILLANCE VERIFICATION

2.0 ELECTRICAL PENETRATIONS

PEN NO.	RESULTS		PEN NO.	RESULTS		PEN NO.	RESULTS	
	SAT	UNSAT		SAT	UNSAT		SAT	UNSAT
2-21			2-57			2-28		
2-65			2-17			2-49		
2-43			2-39			2-5		
2-64			2-41			2-50		
2-62			2-18			2-27		
2-58 (1)			2-40			2-63		
2-19			2-61			2-8		
2-47			2-15			2-56		
2-14			2-12			2-11		
2-9			2-34			2-33		
2-31			2-6			2-55 (2)		

Penetrations are ordered right to left, top to bottom, IAW drawing 233901.

Acceptance Criteria:

EXCEPT AS NOTED EACH ELECTRICAL PENETRATION PROVIDING DIRECT ACCESS FROM THE CONTAINMENT ATMOSPHERE TO THE OUTSIDE ATMOSPHERE IS:

- CLOSED AS INDICATED BY ALL PROTECTIVE PANELS INSTALLED

  OR

- THE LOCAL PRESSURE GAUGE IS INDICATING >0 PSIG.

(continued on next page)

ATTACHMENT 70
(Page 7 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

(continued)

(1) Penetration 2-58 satisfies at least one of the following criteria:

- A blind flange is installed on at least one side of the penetration, or
- IF the Outage Adapter Flange is installed,
  THEN **ENSURE** at least one of the following criteria is satisfied for each penetration.
  It should be noted, the Outage Adapter Flange may have multiple penetrations:

  A. The associated system is "ADAPTER INSTALLED & IN-SERVICE."
  To be considered "In-Service" the following criteria must be met:

  - Electrical Penetration is intact (electrical adapter installed in the penetration AND sealed).
  - Mechanical Penetration is intact (penetration adapter includes a manual isolation valve installed and connected to hoses, piping, permanent or temporary systems. The penetration and associated components are NOT breached by valve alignment or maintenance activity).

    AND

  - Temporary System or Hose is liquid filled (system is NOT required to be pressurized).

    OR

  - Temporary System is gas filled and pressurized.
    (system pressure must be >0 psig).

  OR

  B. The associated penetration is "ADAPTER INSTALLED & CLOSED".
  To be considered "CLOSED", the penetration isolation valve must be CLOSED.

  OR

  C. The associated system is "CLOSED". To be considered "CLOSED",
  a system must be intact (system piping and components are NOT breached by valve alignment or maintenance activity).

(2) Spare penetration is seal welded, but should be verified INTACT OR CAPPED.

ATTACHMENT 70
(Page 8 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

2.0 (continued)

PEN NO.	RESULTS		PEN NO.	RESULTS		PEN NO.	RESULTS	
	SAT	UNSAT		SAT	UNSAT		SAT	UNSAT
2-10			2-51			2- 42		
2-32			2-3 (3)			2-44 (2)		
2-54 (2)			2-25			2-2		
2-59			2-16			2-24		
2-60			2-1			2-46		
2-53			2-23			2-4		
2-13			2-52 (2)			2-26		
2-38			2-7			2-36 (2)		
2-37			2-29			2-22 (2)		
2-45			2-48			2-30 (2)		
2-35			2-20					

Penetrations are ordered right to left, top to bottom, IAW drawing 233901.

Acceptance Criteria:

EXCEPT AS NOTED EACH ELECTRICAL PENETRATION PROVIDING DIRECT ACCESS FROM THE CONTAINMENT ATMOSPHERE TO THE OUTSIDE ATMOSPHERE IS:

- CLOSED AS INDICATED BY ALL PROTECTIVE PANELS INSTALLED

  OR

- THE LOCAL PRESSURE GAUGE IS INDICATING >0 PSIG.

(2) These spare penetrations are seal welded, but should be verified INTACT OR CAPPED.

(3) Penetration 2-3 may NOT indicate >0 psig due to an identified pinhole leak. This leak is evaluated and the disposition for Penetration 2-3 is "use as is"(PIR 00950906548).
Use the alternative Acceptance Criteria for Penetration 2-3.

ATTACHMENT 70
(Page 9 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

2.0 (continued)

PENETRATION IDENTIFICATION	RESULTS	
	SAT	UNSAT
100' Airlock Electrical Penetration Left Side		
100' Airlock Electrical Penetration Right Side		
130' Airlock Electrical Penetration Left Side		
130' Airlock Electrical Penetration Right Side		

NOTE: The airlock electrical penetrations are located just above the outer door to the airlocks.

Acceptance Criteria:

EACH ELECTRICAL PENETRATION PROVIDING DIRECT ACCESS FROM THE CONTAINMENT ATMOSPHERE TO THE OUTSIDE ATMOSPHERE IS:

- CLOSED AS INDICATED BY ALL PROTECTIVE PANELS INSTALLED

  OR

- THE LOCAL PRESSURE GAUGE IS INDICATING >0 PSIG.

SEVEN DAY SURVEILLANCE VERIFICATION

3.0 CONTAINMENT PRESSURE AND RVLIS LEVEL TRANSMITTERS

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION (2)		SAT	UNSAT
M22B	2PT-948D, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN I TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
M23	2PT-948A, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN IV TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
M24B	2PT-948B, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN III TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
M25B	2PT-948C, 2 CONT SPRAY CONTAINMENT PRESS PROT CHAN II TMTR	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
E30C	2PA-2386, 2 CONT SPRAY WIDE RANGE CONTAINMENT PRESSURE CHANNEL III (ABOVE CONT APD)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		

(1) Circle the Acceptance Criteria which is satisfied.
(2) Instruments are located in Inner Penetration Area, El. 78'.
(3) IF a transmitter is NOT intact,
THEN **INSTALL** a blind flange which satisfies the intent of Technical Specification 3.9.4.c.1
AND **COMPLETE** a section of Attachment 5
AND **NOTIFY** the Control Room to place Bezel Information Tag(s) on the associated containment pressure indicator/RVLIS in the Control Room.
(4) The preferred method of isolation is "Transmitter Intact."

ATTACHMENT 70
(Page 11 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

3.0 (continued)

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS	
NO.	DESCRIPTION (2)		SAT	UNSAT
E54	6521XB, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1311)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6526XB, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-1LT1310)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6528XB, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1312)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
E55	6522XD, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1322)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6527XD, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1320)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
	6529XD, DYNAMIC RANGE TRANSMITTER BELLOWS (S2RVL-2LT1321)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		
E55C	2PA-2405, 2 CONT SPRAY WIDE RANGE CONTAINMENT PRESSURE CHANNEL IV (ABOVE RVLIS XMITTER PANEL)	TRANSMITTER INTACT (4) OR BLIND FLANGE INSTALLED (3)		

(1) Circle the Acceptance Criteria which is satisfied.
(2) Instruments are located in Electrical Penetration Area, El. 78'.
(3) IF a transmitter is NOT intact,
THEN **INSTALL** a blind flange which satisfies the intent of Technical Specification 3.9.4.c.1
AND **COMPLETE** a section of Attachment 5
AND **NOTIFY** the Control Room to place Bezel Information Tag(s) on the associated containment pressure indicator/RVLIS in the Control Room.
(4) The preferred method of isolation is "Transmitter Intact."

ATTACHMENT 70
(Page 12 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

4.0 **MECHANICAL PENETRATIONS**

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M01 M05 M14 M62	21 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS System Piping	Current Attachment 69 Dated: _____ OR CLOSED OR INTACT & ISOLATED IAW ATT. 6A			
M02 M06 M12 M62A	22 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS System Piping	Current Attachment 69 Dated: _____ OR CLOSED OR INTACT & ISOLATED IAW ATT. 6B			
M03 M07 M15 M63	23 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS system Piping	Current Attachment 69 Dated: _____ OR CLOSED OR INTACT & ISOLATED IAW ATT. 6C			
M04 M08 M13 M63A	24 STEAM GENERATOR & ATTACHED AF, CN (BF), MS, GB & SS System Piping	Current Attachment 69 Dated: _____ OR CLOSED OR INTACT & ISOLATED IAW ATT. 6D			
E22	2VC13/14, BACKUP RMS SAMPLE SUPPLY	Current Attachment 69 Dated: _____ OR CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 7 OR BLIND FLANGE INSTALLED			
E22A	2VC9/10, BACKUP RMS SAMPLE RETURN	Current Attachment 69 Dated: _____ OR CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 8 OR BLIND FLANGE INSTALLED			
E22B	2VC7/8, RMS NORMAL SAMPLE RETURN	Current Attachment 69 Dated: _____ OR CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 9 OR BLIND FLANGE INSTALLED			
E22C	2VC11/12, RMS NORMAL SAMPLE SUPPLY	Current Attachment 69 Dated: _____ OR CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 10 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 13 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (3)
NO.	DESCRIPTION		SAT	UNSAT	
M09	2RH2, RHR SUCTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE (2)			
M10	21SJ49, RHR DISCHARGE TO COLD LEG LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 11 OR BLIND FLANGE INSTALLED			
M11	22SJ49, RHR DISCHARGE TO COLD LEG LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 12 OR BLIND FLANGE INSTALLED			
M16	2RH26, RHR HOT LEG INJECTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 13 OR BLIND FLANGE INSTALLED			
M17	2SS900/901 DEAD WEIGHT TESTER LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 14 OR BLIND FLANGE INSTALLED			
M17A	2CV7, LETDOWN LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 15 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) IF this Acceptance Criteria can NOT be satisfied, THEN IMMEDIATELY **REFER** to TSAS 3.9.8.1.a.
(3) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 14 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M18	2SS33/104, RCS SAMPLE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 16 OR BLIND FLANGE INSTALLED			
M18A	2SS49/107, PZR LIQUID SAMPLE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 17 OR BLIND FLANGE INSTALLED			
M18B	2SS64/110, PZR STEAM SPACE SAMPLE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 18 OR BLIND FLANGE INSTALLED			
M18C	2PR17/18, PRT TO GAS ANALYZER	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 19 OR BLIND FLANGE INSTALLED			
M18D	2WL96/97, RCDT TO GAS ANALYZER	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 20 OR BLIND FLANGE INSTALLED			
M19	VC PURGE SUPPLY LINE (3)	Current Attachment 69 Dated: _____ OR OPERABLE IAW S2.OP-ST.CBV-0004(Q) OR INTACT & ISOLATED IAW ATT. 21 OR BLIND FLANGE INSTALLED			
M20	VC PURGE EXHAUST LINE (4)	Current Attachment 69 Dated: _____ OR OPERABLE IAW S2.OP-ST.CBV-0004(Q) OR INTACT & ISOLATED IAW ATT. 22 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.
(3) May be open to support LCO 3.9.4. Manual closure capability of 2VC1 from the CR is required.
(4) May be open to support LCO 3.9.4. Manual closure capability of 2VC4 from the CR is required.

ATTACHMENT 70
(Page 15 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M21	2NT25, N2 TO PRT	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 23 OR BLIND FLANGE INSTALLED			
M21A	2WL98/99, RCDT TO VENT HDR	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 24 OR BLIND FLANGE INSTALLED			
M21B	2NT32, N2 TO ACCUMULATORS	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 25 OR BLIND FLANGE INSTALLED			
M22	2DR29, DM TO CONTAINMENT	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 26 OR BLIND FLANGE INSTALLED			
M22A	2WR80, PW TO CONTAINMENT	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 27 OR BLIND FLANGE INSTALLED			
M23A	22CA330, B AIR HDR	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 28 OR BLIND FLANGE INSTALLED			
M23B	2SA591, SA TO UNIT 2 CONTAINMENT	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 29 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 16 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M25	2SJ60, SI TEST LINE TO CVCS HUT	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 30 OR BLIND FLANGE INSTALLED			
M25A	2SS27/103, ACCUMULATOR SAMPLE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 31 OR BLIND FLANGE INSTALLED			
M26	21CV98, 21 SEAL INJECTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 32 OR BLIND FLANGE INSTALLED			
M26A	22CV98, 22 SEAL INJECTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 33 OR BLIND FLANGE INSTALLED			
M26B	23CV98, 23 SEAL INJECTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 34 OR BLIND FLANGE INSTALLED			
M26C	24CV98, 24 SEAL INJECTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 35 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 17 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M27	2WL12/13, RCDT DISCHARGE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 36 OR BLIND FLANGE INSTALLED			
M28	21SJ44, RHR SUCTION FROM CONTAINMENT SUMP LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 37 OR BLIND FLANGE INSTALLED			
M29	22SJ44, RHR SUCTION FROM CONTAINMENT SUMP LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 38 OR BLIND FLANGE INSTALLED			
M32	2CC118, RCP MOTOR INLET FLOW LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 39 OR BLIND FLANGE INSTALLED			
M33	2CC136, RCP MOTOR RETURN LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 40 OR BLIND FLANGE INSTALLED			
M34 M35	2CC113/215, EXCESS LETDOWN LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 41 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 18 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M36	2CV69, CHARGING LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 42 OR BLIND FLANGE INSTALLED			
M37	2CV116, SEAL RETURN HDR	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 43 OR BLIND FLANGE INSTALLED			
M39	2CC131, THERMAL BARRIER RETURN LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 44 OR BLIND FLANGE INSTALLED			
M40	2VC5/6, CONTAINMENT PRESSURE/VACUUM RELIEF LINE	Current Attachment 69 Dated: _____ OR OPERABLE IAW S2.OP-ST.CBV-0004(Q) OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 45 OR BLIND FLANGE INSTALLED			
M41	2SJ135, SI DISCHARGE TO COLD LEG	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 46 OR BLIND FLANGE INSTALLED			
M42	2SJ12/13, COLD LEG INJECTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 47 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 19 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M43	21 CS DISCHARGE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 48 OR BLIND FLANGE INSTALLED			
M44	22 CS DISCHARGE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 49 OR BLIND FLANGE INSTALLED			
M45	2WL16/17, CONTAINMENT SUMP DISCHARGE LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 50 OR BLIND FLANGE INSTALLED			
M46 M51	25SW58/72, SW SUPPLY TO/RETURN FROM 25 CFCU	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 51 OR BLIND FLANGE INSTALLED			
M47 M52	24SW58/72, SW SUPPLY TO/RETURN FROM 24 CFCU	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 52 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 20 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M48 M53	23SW58/72, SW SUPPLY TO/RETURN FROM 23 CFCU	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 53 OR BLIND FLANGE INSTALLED			
M49 M54	21SW58/72, SW SUPPLY TO/RETURN FROM 21 CFCU	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 54 OR BLIND FLANGE INSTALLED			
M50 M55	22SW58/72, SW SUPPLY TO/RETURN FROM 22 CFCU	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 55 OR BLIND FLANGE INSTALLED			
M56	21CA330, A AIR HDR	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 56 OR BLIND FLANGE INSTALLED			
M56A	2CS900/902, SAMPLE LINE	Current Attachment 69 Dated: _____ OR INTACT & ISOLATED IAW ATT. 57 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M57	2FP147, FP TO CONTAINMENT	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 58 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 21 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (2)
NO.	DESCRIPTION		SAT	UNSAT	
M60	ECCS RELIEF LINE TO CONTAINMENT SUMP	Current Attachment 69 Dated: _____ OR CLOSED OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 59 OR BLIND FLANGE INSTALLED			
M61	2SA268/270, CONTAINMENT PRESSURE TEST LINE	Current Attachment 69 Dated: _____ OR INTACT & ISOLATED IAW ATT. 60 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M61A	2SA265/267, CONTAINMENT PRESSURE TEST LINE	Current Attachment 69 Dated: _____ OR INTACT & ISOLATED IAW ATT. 61 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M61B	2SA262/264, CONTAINMENT PRESSURE TEST LINE	Current Attachment 69 Dated: _____ OR INTACT & ISOLATED IAW ATT. 62 OR IN-SERVICE LLRT OR BLIND FLANGE INSTALLED			
M66	2SF22/2WL191, RWPP CANAL SUCTION LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 63 OR BLIND FLANGE INSTALLED			
M66A	2SF36/2WL190, RWPP TO CANAL LINE	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR INTACT & ISOLATED IAW ATT. 64 OR BLIND FLANGE INSTALLED			

(1) Circle the Acceptance Criteria which is satisfied.
(2) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

ATTACHMENT 70
(Page 22 of 22)

SEVEN DAY SURVEILLANCE VERIFICATION

PENETRATION		ACCEPTANCE CRITERIA (1)	RESULTS		ATT 69 (1)
NO.	DESCRIPTION		SAT	UNSAT	
M70	22SJ40, SI DISCHARGE TO HOT LEG	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 65 OR BLIND FLANGE INSTALLED			
M71	21SJ40, SI DISCHARGE TO HOT LEG	Current Attachment 69 Dated: _____ OR IN-SERVICE OR IN-SERVICE LLRT OR CLOSED OR INTACT & ISOLATED IAW ATT. 66 OR BLIND FLANGE INSTALLED			

(1) Provide indication (✓) if Attachment 69 is completed for the respective penetration.

2.0 **SM/CRS FINAL REVIEW AND APPROVAL:**

This Attachments is reviewed for completeness and accuracy. Technical Specification compliance, procedure compliance, and Acceptance Criteria are evaluated. **[C0283]**

Signature:_____ Date:_____
SM/CRS

EXHIBIT 1

OEH PENETRATION IDENTIFICATION
UNIT 2