

PROCEDURE DEVELOPMENT
FD 7635-7

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SHEET 1 of 2

PROCEDURE ACTIVITY TRACKING NUMBER
91-1849

SECTION 1 - IDENTITY

PROCEDURE NO. **NG-FN-00324 R00** PROPOSED REVISION NO. **NA** PROPOSED CHANGE NO. **G-2** NEW CANCELLATION NORMAL CHANGE LIMITED CHANGE TEMPORARY APPROVAL

OLD NO. (for replacement) _____ REVISION INACTIVATION FROM _____ TO _____ DATE/EVENT _____

PROCEDURE TITLE: **BORIC ACID CORROSION CONTROL**

PROCEDURE CLASSIFICATION: SA NOR NOR

SAFETY REVIEW REQUIRED? YES NO

PERIODIC REVIEW CYCLE: 1 YEAR 2 YEAR 3 YEAR OTHER

PAT NOS. CLOSED OUT: **90-2201**
90-5436

ACTIVITY SUMMARY: **THE PURPOSE OF THIS CHANGE IS TO CORRECT PREVIOUS ERRORS AND TO COMPLY WITH NEW REGULATIONS ASME SECTION II RELATED REQUIREMENTS REMOVED DUE TO THEIR INCLUSION IN PERFORMANCE PROCEDURES. INFORMATION IS CONTINUED**

PROJECT PREPARED BY: **Tom P. Mc...** DATE: **5/29/91**

SECTION 2 - QUALIFIED REVIEW

VALIDATION REQUIRED? YES NO METHOD OF VALIDATION: **N/A** ASARA REVIEW REQUIRED? YES NO

JUSTIFICATION: **VALIDATION IS NOT REQUIRED SINCE CHANGE PRIMARILY DIRECTS INSPECTIONS TO BE PERFORMED BY SYSTEMS ENGINEERING. THESE INSPECTIONS ARE VISUAL AND WILL IN NO WAY CHALLENGE A SYSTEM, OR SHUTDOWN THE PLANT. AN**

QUALIFIED REVIEWER: **Tom P. Mc...** DATE: **8/2/91** PROCEDURE SPONSOR: **Eugene (M...)** DATE: **8/8/91**

SECTION 3 - CROSS-DISCIPLINARY REVIEW DUE:

REQUIRED	REQUESTED	ORG	CONCURRENCE/DATE	REQUIRED	REQUESTED	ORG	CONCURRENCE/DATE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OPS	8/2/91	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SYSTEM 1 ETC.	8/2/91
<input checked="" type="checkbox"/>	<input type="checkbox"/>	PE	8/2/91	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	OPS	8/2/91	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	QAD	8/20/91	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	PM	8/2/91	<input type="checkbox"/>	<input type="checkbox"/>		

SECTION 4 - ATTACHMENTS

COMPLETED AND ATTACHED

YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	DOCUMENT INTERFACE WORKSHEET	YES <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	VALIDATION CHECKLIST	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	VENDOR MANUAL CONFIRMATION FORM
YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	COMMITMENT VERIFICATION SUMMARY	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	SAFETY REVIEW	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	DOCUMENT REVIEW SHEETS
YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	EDITORIAL VERIFICATION CHECKLIST	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	SAFETY EVALUATION	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	REVISED CROSS-REFERENCES LIST
								OTHER: PCRS

QUALIFIED REVIEWER CONCURRENCE: **Tom P. Mc...** DATE: **8-29-91**

SECTION 5 - TEMPORARY APPROVAL

MOLE SMO: **N/A** PLANT MANAGER/DESIGNEE: **N/A** NOT REQUIRED: **N/A**

SECTION 6 - CONCURRENCE/FINAL APPROVAL

PROCEDURE SPONSOR: **Tom P. Mc...** DATE: **8/2/91** SRB **N/A**

APPROVAL AUTHORITY: **Tom P. Mc...** DATE: **8/2/91** PLANT MANAGER **N/A**

SECTION 7 - TRAINING/PROCEDURE EFFECTIVITY

TRAINING REQUIRED? YES NO JUSTIFICATION FOR NO TRAINING: **Minor nature of changes. Personnel will use the procedure on already existing changes.** TRAINING COMPLETION/COPIES OF DOCUMENTS ATTACHED: **N/A**

PROCEDURE EFFECTIVE DATE OR EVENT: **Approval plus one day 08/30/91** PROCEDURE SPONSOR: **Tom P. Mc...**

SECTION 1 - IDENTITY (CONTINUED)

guidelines also incorporated into procedure

SECTION 2 - QUALIFIED PROCEDURE REVIEW (CONTINUED)

ACARA REVIEW IS NOT REQUIRED SINCE THE CHANGE WILL NOT INCREASE PERSONNEL EXPOSURE, ADVERSELY AFFECT RADIOLOGICAL CONDITIONS, OR GENERATE AN INCREASED AMOUNT OF SOLID, LIQUID, OR GASEOUS RADIOACTIVE.

Additional reasoning is, a validation is not required that these changes incorporate informal guidance which has been used since last PFO. Personnel who will use portions of the procedure that changed are already familiar with the requirements and the intent of a validation has already been met.

SECTION 7 - TRAINING/PROCEDURE EFFECTIVITY (CONTINUED)

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 89-6877

SECTION 1 - IDENTITY

PROCEDURE NO. NO-EN-00324 LCO PROPOSED REVISION NO. - PROPOSED CHANGE NO. C-1 NEW CANCELLATION NORMAL CHANGE LIMITED CHANGE TEMPORARY APPROVAL
 OLD NO. (for normal change) _____ REVISION INACTIVATION FROM _____ TO _____ RESTRICTED (DATE/EVENT)

PROCEDURE TITLE Boric Acid Corrosion Control

PROCEDURE CLASSIFICATION SR OR N-OR CHANGE TO? YES NO SAFETY REVIEW REQUIRED? YES NO Performs in conjunction with other activity _____ PERIODIC REVIEW CYCLE 1 YEAR 2 YEAR 5 YEAR OTHER _____ PAT NOS. CLOSED OUT _____

ACTIVITY SUMMARY Clarified that this procedure is not limited to Reactor Coolant System leaks, but applies to leaks on all systems located for the purpose of reactivity control. added references and the specific requirements of ASME XI, IWA 5000 for the evaluation and determination of corrective action for identified boric acid leaks using ASME XI pressure CONTINUED

PROCEDURE PREPARED BY K.R. Ellison 17223 DATE 11/7/89

SECTION 2 - QUALIFIED REVIEW

VALIDATION REQUIRED? YES NO METHOD OF VALIDATION N/A ALARA REVIEW REQUIRED? YES NO

JUSTIFICATION This administrative procedure change broadens the scope of the procedure only and does not require validation. This change does not increase personnel exposure or generate RADWASTE CONTINUED

QUALIFIED REVIEWER J. Johns DATE 11/29/89 PROCEDURE SPONSOR Arnie Egan DATE 11/30/89

SECTION 3 - CROSS-DISCIPLINARY REVIEW DUE:

PRIMARY REQUIRED	REQUESTED	ORG	CONCURRENCE DATE	PRIMARY REQUIRED	REQUESTED	ORG	CONCURRENCE DATE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	OPS	<u>1/11/90</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	QAD	<u>1/15/90</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SYS. ENG	<u>1/10/90</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PM	<u>1/12/90</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	DESIGN ENG	<u>1/12/90</u>	<input type="checkbox"/>	<input type="checkbox"/>		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	PE	<u>1-9-90</u>	<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		
<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>		

SECTION 4 - ATTACHMENTS

COMPLETED AND ATTACHED YES N/A DOCUMENT INTERFACE WORKSHEET YES N/A VALIDATION CHECKLIST YES N/A VENDOR MANUAL CONFIRMATION FORM
 YES N/A COMMITMENT VERIFICATION SUMMARY YES N/A SAFETY REVIEW YES N/A DOCUMENT REVIEW SHEETS
 YES N/A EDITORIAL VERIFICATION CHECKLIST YES N/A SAFETY EVALUATION YES N/A REVISED CROSS REFERENCES LIST
 YES N/A OTHER

PRIMARY REVIEWER CONCURRENCE [Signature] DATE 1-16-90 QUALIFIED REVIEWER J. Johns DATE 1/17/90

SECTION 5 - TEMPORARY APPROVAL

MANAGEMENT SRO _____ DATE _____ PLANT MANAGER DEBRAVE NOT REQUIRED DATE _____

SECTION 6 - CONCURRENCE/FINAL APPROVAL

PROCEDURE SPONSOR Arnie Egan DATE 1/19/90 PLANT MANAGER PLANT MANAGER DATE _____

SECTION 7 - TRAINING/PROCEDURE EFFECTIVITY

TRAINING REQUIRED? YES NO JUSTIFICATION FOR NO TRAINING THIS CHANGE BROADENS THE SCOPE OF APPLICATION TO INCLUDE ASME PRESSURE TESTING. PERSONNEL RESPONSIBLE FOR ASME PRESSURE TESTING PARTICIPATED IN THE DEVELOPMENT AND OPERATIONAL CHANGES. TRAINING COMPLETE? YES NO COPIES OF DOCUMENTS ATTACHED? YES NO

PROCEDURE EFFECTIVE DATE OR EVENT NORMAL - 2 DAY JAN 23 1990 PROCEDURE SPONSOR Arnie Egan DATE 1/18/90

DBNPS UPDATE BY _____

PROCEDURE TITLE SHEET



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SUBJECT Boric Acid Corrosion Control	EFFECTIVE DATE SEP 08 1989	INITIATED BY Patrick Connell
	SUPERSEDES N/A	APPROVED BY (Division Director)

Approved by: DC Shelton / DJM DATE 8/23/89
 Vice President, Nuclear

Released for Controlled Distribution by:
DA [Signature] EFFECTIVE DATE 9/8/89
 Systems & Procedures General Supervisor

SRB Review Required? X Yes No

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REVISION LOG

Revision Number

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Revision Summary

This is a new procedure.

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NO EXPLAN

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1.0 PURPOSE

1.1 This procedure provides a program which implements systematic measures to ensure that boric acid corrosion at Davis-Besse Nuclear Power Station does not degrade the assurance that the reactor coolant pressure boundary (as defined in 10 CFR 50.2) will have an extremely low probability of abnormal leakage, rapidly propagating failure, or gross rupture. These measures include:

- 1.1.1 Identification of principal locations where leaks can cause degradation of the primary pressure boundary by boric acid corrosion.
- 1.1.2 Procedures for locating small coolant leaks.
- 1.1.3 Methods for conducting examinations and performing engineering evaluations to establish the impact on the reactor coolant pressure boundary when leakage is located.
- 1.1.4 Corrective actions to prevent recurrences of boric acid leaks.

1.2 Deleted

2.0 APPLICABILITY/SCOPE

2.1 This procedure applies whenever a coolant leak is detected anywhere within the reactor coolant pressure boundary of the Plant. The leak may be in the form of running or dripping water, boric acid residue, or discolored (e.g., rust stained) insulation.

2.1.1 Routine inspections for coolant leaks shall be conducted during the performance of activities governed by the following procedures:

- a. DB-PF-03065, ASME Section XI Pressure Tests
- b. DB-OP-06901, Plant Startup
- c. DB-OP-06903, Plant Shutdown and Cooldown.

2.1.2 Coolant leaks or evidence of coolant leaks may also be detected during routine operation of the Plant or during Plant Maintenance.

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2.2 Deleted

2.3 This procedure may also apply whenever excessive Reactor Coolant System (RCS) leakage is identified during the performance of DB-SP-03357, RCS Water Inventory Balance.

2.4 This procedure does not circumvent or alter the intent of DB-OP-00000, Conduct of Operations, or DB-MN-00001, Conduct of Maintenance, which allow immediate corrective actions and minor maintenance without an MWO.

2.5 This procedure does not require implementing procedures.

3.0 REFERENCES

3.1 10 CFR 50.2, Code of Federal Regulations, Title 10 - Energy

3.2 NG-QA-00702, Potential Condition Adverse to Quality Reporting

3.3 Deleted

3.4 DB-PF-03065, ASME Section XI Pressure Tests

3.5 DB-PF-00204, ASME Section XI Pressure Testing

3.6 Deleted

3.7 DB-OP-00000, Conduct of Operations

3.8 DB-OP-02522, Small RCS Leaks

3.9 DB-OP-06901, Plant Startup

3.10 DB-MN-00002, Preventive Maintenance

3.11 DB-OP-06903, Plant Shutdown and Cooldown

3.12 DB-MN-00001, Conduct of Maintenance

3.13 DB-PN-00007, Control of Work

3.14 DB-SP-03357, RCS Water Inventory Balance.

3.15 EPRI NP-5985, Boric Acid Corrosion of Carbon and Low Alloy Steel Pressure Boundary Components in PWRs

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3.16 NUREG/CR-2827, Boric Acid Corrosion of Ferritic Reactor Components

3.17 NUREG-1095, Evaluation of Responses to IE Bulletin 82-02.
Degradation of Threaded Fasteners in Reactor Coolant Pressure
Boundary of Pressurized Water Reactor Plants.

3.18 Deleted

3.19 DB-OP-00005, Operating Logs and Reading Sheets

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4.0 DEFINITIONS

None

5.0 RESPONSIBILITIES

5.1 The person finding the coolant leak shall be responsible for informing the Shift Supervisor of the location and magnitude of the leak.

5.2 The Shift Supervisor shall be responsible for:

5.2.1 Informing Systems Engineering of the location and magnitude of the leak.

NOTE: When the leak is found during performance of an ASME Section XI pressure test, the person conducting the pressure test shall be responsible for the notification of Systems Engineering.

5.2.2 Determining Plant Shutdown requirements based on RCS leak rates and safety concerns reported by Systems Engineering.

5.3 Systems Engineering shall be responsible for:

NOTE: These actions may be completed by Performance Engineering when the leak or evidence of leakage is noted during an ASME Section XI pressure test and VT-2 visual examination.

5.3.1 Performing and documenting the necessary inspection(s) of the detected leak.

5.3.2 Promptly responding to and informing the Shift Supervisor of any immediate safety concerns raised by the leak inspections.

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[Faint, mostly illegible text, likely bleed-through from the reverse side of the page.]

- 5.3.3 Taking the necessary actions to:
 - a. Have boric acid residue removed from the affected component(s) if necessary.
 - b. Have insulation and other obstructions removed as necessary to gain access to the leak source.
- 5.3.4 Determining the root cause and source of the coolant leak.

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5.3.5 Forwarding the inspection report to Design Engineering and providing additional technical information as required.

5.4 Design Engineering shall be responsible for the following:

5.4.1 Assessing the information provided by Systems Engineering regarding the coolant leak and available industry technical data (e.g., NUREGs and EPRI publications) to:

- a. Determine the extent of damage incurred by the affected component(s).
- b. Perform any necessary stress and corrosion calculations for determining extent of degradation to the affected pressure boundary.
- c. Determine immediate and/or long term corrective actions to stop the leak and prevent recurrence of boric acid corrosion.

6.0 PROCEDURE

6.1 Principal Leak Locations

6.1.1 All areas and components within primary system pressure boundaries are capable of developing leaks. However, when checking for leaks, it is important to know the principal locations where they are most likely to cause degradation of the pressure boundary by boric acid corrosion. The following locations in primary systems have been identified as the most probable locations of leakage:

- a. Steam Generator and Pressurizer manways and handholes
- b. Seal Welds
- c. Thermowells
- d. Reactor Coolant Pump seals and casing flanges
- e. Control Rod Drive flanges
- f. Piping flanges and bolted connections
- g. Valves bonnets and packing glands
- h. The Reactor Vessel head o-rings
- i. Threaded connections.

6.2 Locating Small Leaks

6.2.1 Personnel in the Plant should always be watchful for coolant leaks whenever performing work on primary systems. Larger coolant leaks are normally readily noticeable. Small coolant leaks, however, may show up only as an accumulation of boric acid residue from the leak source. Once the water has evaporated, boric acid residue appears as a white crystal-like substance. It is normally found where metals are joined together, although it may also be the result of a leak which has dripped down from another source, such as an accumulation on the floor beneath the actual leak. Activities such as valve positioning, equipment operation, corrective maintenance, and routine inspections all provide opportunities for detecting small coolant leaks.

6.2.2 Routine inspections for coolant leaks shall be conducted during the performance of activities governed by the following procedures:

- a. DB-PF-03065, ASME Section XI Pressure Tests
- b. DB-OP-06901, Plant Startup
- c. DB-OP-06903, Plant Shutdown and Cooldown
- d. DB-MN-00002, Preventive Maintenance.

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6.2.3 Inspections for coolant leaks may also be required by the following procedures:

- a. DB-SP-03357, RCS Water Inventory Balance
- b. DB-OP-02522, Small RCS Leaks.

6.2.4 Once a coolant leak is discovered in containment:

- a. The person finding the leak shall:
 - 1. Inspect other components in the immediate area for possible damage.
 - 2. Immediately inform the Shift Supervisor of the location and magnitude of the leak(s) or boric acid residue.
 - 3. Contact the Radiological Controls Supervisor to control the spread of contamination.
- b. The Shift Supervisor, in turn, shall contact Systems Engineering to inspect the leak.

(Continued on page 10a)

6.2.5 When boric acid leakage or boric acid residues are detected during ASME Section XI pressure tests of the Reactor Coolant System, the person conducting the test shall: C-2

- a. Inform the Shift Supervisor of the location and magnitude of the leak or residue.
- b. Perform an initial inspection of attached areas and inform Systems Engineering of the location and magnitude of the leak or residue. C-2

6.3 Examination and Evaluation

6.3.1 Upon notification of boric acid build up in the Plant, Systems Engineering shall perform an initial inspection of the affected area, if not already performed, to determine the "as found" conditions and documenting the results using drawings, photographs, or other aids as appropriate. Steps with a "*" should be performed because they assist in determining if a boric acid corrosion concern exists. The remaining steps help identify the scope of the problem.

- a. The total amount of boron deposits and the amount of boron on each component should be estimated. This may be to identify the build-up as a light film or an estimate of the weight and/or volume. Coordinate with RADCON before collecting any boron samples if this is determined to be appropriate.*
- b. The area of the identified boron build-up should be inspected to verify that the boron is localized to the identified area. This should include a verification that a boron build-up is not located at an elevation above or below the identified area or on other near-by components. All components with a boron build-up should be identified. The area should also be inspected to determine if boric acid could have entered the internals of a component or the inside of insulation and spread internally to a location that is not visible and is susceptible to boric acid corrosion.* C-2
- c. The affected areas should be inspected to identify any signs of corrosion. This will most likely be exhibited by red rust or red/brown stained boron. If corrosion is present, the amount of corrosion should be estimated. This should include an estimate of corrosion products present as well as an estimate of base metal removed.*

(Continued)

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6.3.1 (Continued)

- d. The affected components should be carefully inspected to determine if a boric acid solution is present or just crystals and residue. If active leakage is present a leak rate should be measured or estimated and then action taken to stop the leakage.*
- e. The material that makes up affected components should be determined. Components that are fabricated of stainless steel or inonel do not require further evaluation. Carbon steel components can experience wastage rates up to one third inch per month under "ideal" conditions. Accelerated corrossions rates occur with temperatures near 200 degrees F and when an active leakage exists. Under these conditions, most of the water from the boric acid solution will attack the carbon steel. If the build up or corrosion is limited to valve handwheels or other extraneous appurtenances that do not affect component operability then the evaluation should be considered complete.*
- f. The temperature of the affected components should be determined for both existing conditions and for other conditions that the component may be subjected to. As an example, boron may be identified during a hydrostatic test conducted during refueling and the component is relatively cool but during power operation the component is subjected to high temperatures. Actual temperatures may be measured using installed instrumentation or a contact pyrometer. Temperatures may be estimated from previous log readings or vendor information.
- g. The concentration of the boric acid solution in the system should be determined for both the existing conditions and for other condition the component may be subjected. This is most easily accomplished by a review of Chemistry Logs.
- h. Identification of insulation of any other type of interference which must be removed to gain access to the leak.
- i. Any preliminary preparations necessary for performing subsequent inspections.

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- 6.3.2 System Engineering shall notify the Shift Supervisor of any immediate safety concerns raised by the initial inspection.
- 6.3.3 Based on the magnitude of the leak and extent of damage to the affected area, Systems Engineering shall document the inspections by one of the following:
 - a. Writing a Potential Condition Adverse to Quality (PCAQ) Report per NG-QA-00702, Potential Condition Adverse to Quality Reporting
 - b. Writing a Work Request per DB-PN-00007, Control of Work.
- 6.3.4 If boric acid residue is present, Systems Engineering shall contact Radiological Controls for cleanup of the affected area.
- 6.3.5 Systems Engineering shall determine whether follow-up or more detailed inspections of the leak are necessary to fully assess component damage and determine possible corrective action. C-2

NOTE: If the magnitude of the leak or the extent of the component damage is extreme, Systems Engineering may confer with Design Engineering before taking further action.

- a. If a detailed inspection is deemed necessary, then Systems Engineering shall perform the following as required: C-2
 - 1. Write service requests or work requests per DB-PN-00007, Control of Work, as necessary for the removal of any insulation, scaffolding, cables, or any other type of interference which prevents access to the leak.
 - 2. Perform subsequent inspections of the affected component(s) as necessary and include the results with the initial inspection. These inspections should include: C-2
 - a) A detailed description of visible damage to the affected area. This description should include the presence of pitting or material wastage. If corrosion is present, then the depth of

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pitting or wastage should be identified. This information is required for the analysis of component integrity.

- b) Pictures of the affected area, if possible.
- c) Identification of any other affected components not revealed in the initial inspection.
- d) Any additional information regarding the leak source and leak path.
- e) Determination of the leak rate, if possible.
- f) Determining the root cause of the leak.

6.3.6 If a PCAQ was generated in step 6.3.3, then:

- a. Systems Engineering shall forward the PCAQ to Design Engineering via the PCAQ Review Board and provide any additional system technical information as required.
- b. Design Engineering shall perform the following:
 - 1. Review the inspection report and request additional information from Systems Engineering as necessary to assess the leak.
 - 2. Assess the extent of component damage.
 - 3. Determine the component wall degradation rate.

NOTE: NUREG and EPRI Manuals, available in the Technical Library, contain helpful reference material for determining boric acid corrosion rates:

- a. EPRI NP-5985, Boric Acid Corrosion of Carbon and Low Alloy Steel Pressure Boundary Components in PWRs

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- b. NUREG/CR-2827, Boric Acid Corrosion of Ferritic Reactor Components
 - c. NUREG-1095, Evaluation of Responses to IE Bulletin 82-02, Degradation of Threaded Fasteners in Reactor Coolant Pressure Boundary of Pressurized Water Reactor Plants.
4. Perform any necessary stress calculations for assessing continued pressure boundary integrity.
 5. Determine the corrective action to be taken if repair or replacement are necessary to support continued service of the component. | C-1
 6. Determine the corrective actions to be taken to prevent recurrence of boric acid corrosion. These corrective actions should include consideration of plant design modifications and operating procedure modifications which would:
 - a. Reduce the probability of leaks at locations where they may cause corrosion damage. | C-1
 - b. Entail the use of corrosion resistant materials or the application of protective coatings or claddings.
 - c. Redesign insulation layout that would permit draining or shunting of coolant leaks away from critical areas.

7.0 RECORDS

- 7.1 If the inspection report was documented as a PCAQ, it shall be processed by Nuclear Records Management as per NG-QA-00702, Potential Condition Adverse to Quality Reporting.
- 7.2 If the inspection report was documented as an MWO, it shall be processed by Nuclear Records Management as in DB-PN-00007, Control of Work.
- 7.3 The following non-quality assurance records are completed by this procedure and may be captured and submitted to Nuclear Records Management, in accordance with NG-IM-00106:
 - 7.3.1 None

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COMMITMENTS

Section

Reference

Comments

8.0

TERMS ID 014997

This procedure is being implemented in response to NRC Generic Letter 88-05, BORIC ACID CORROSION OF CARBON STEEL REACTOR PRESSURE BOUNDARY COMPONENTS IN PWR PLANTS.

All

TERMS ID 008404

1.1

TERMS ID 015041

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END