

Nuclear Power Business Unit
TEMPORARY CHANGE REVIEW AND APPROVAL

GROUP
 TRACKING

Note: Refer to NP 1.2.3, Temporary Procedure Changes, for requirements.

Page 1 of _____

I - INITIATION
 Doc Number AOP 3 Current Rev 4 Unit PB1 Temp Change No. 2002-0840
 Document Title Steam Generator Tube Leak

Existing Effective Temporary Changes N/A

Brief Description Add AFW Minimum Flow Requirements to Foldout Page.

(Identify specific changes on Form PBF-0026c, Document Review and Approval Continuation, and include with the package)

Initiate PBF-0026h and include with the change.

Other documents required to be effective concurrently with the temporary change: n/a

Changes pre-screened according to NP 5.1.8? NO YES (Provide documentation according to NP 5.1.8)

Screening completed according to NP 5.1.8? NA YES (Attach copy)

Safety Evaluation Required? NO YES (If Yes, a revision may be processed or final reviews and approvals shall be obtained before implementing)

Determine if the change constitutes a Change Of Intent to the procedure by evaluating the following questions.
 (If any answers are YES, a revision may be processed or final reviews and approvals shall be obtained before implementing)

Will the proposed change:	YES	NO
1. Require a change to, affect or invalidate a requirement, commitment, evaluation or description in the Current or ISFSI Licensing Basis (as defined in NP 5.1.8 and NP 5.1.7)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Cause an increase in magnitude, significance or impact such that it should be processed as a revision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Delete or modify a prerequisite, initial condition, precaution, limitation or other steps that could have safety significance or affect the procedure's margin of safety?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Delete QC hold points, Independent Verification or Concurrent Check steps without the related step(s) that require the performance also being deleted?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Change Tech Spec or other regulatory acceptance criteria other than for re-baselining purposes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Require a change to the procedure Purpose or change the procedure classification?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initiated By (print/sign) Ross Groehler [Signature] Date 10/30/2002

II - INITIAL APPROVAL

This change is correct and complete, can be performed as written, and does not adversely affect personnel or nuclear safety, or Plant operating conditions.

Group Supervisor (print/sign) IVANORNBUSCH [Signature] Date 10/30/02
 (Cannot be the Initiator)

This change does not adversely affect Plant operating conditions. (Safety Related procedures only)

Senior Reactor Operator (print/sign) [Signature] [Signature] Date 10/30/02
 (Cannot be the Initiator or Group Supervisor)

III - PROCEDURE OWNER REVIEW

Permanent One-time Use Expiration Date, Event or Condition: _____
 Hold change until procedure completed (final review and approval still required within 14 days of initial approval)

QRMSS Review NOT Required (Admin/NNSR only) QR Review Required MSS Review Required (Reference NP 1.6.5)

Procedure Owner (print/sign) IVANORNBUSCH [Signature] Date 10/30/02
 This Change and supporting requirements correctly completed and processed

IV - FINAL REVIEW AND APPROVAL

(Must be completed within 14 days of initial approval) (The Initiator, OR and Approval Authority shall be independent from each other)

OR/MSS (print/sign) [Signature] [Signature] Date 10/30/02
 Indicates 50.59/72.48 applicability assessed, any necessary screenings/evaluations performed, determination made as to whether additional cross-disciplinary review required, and if required, performed.

MSS Meeting No. _____
 Approval Authority (print/sign) DAVID DYZAK [Signature] Date 10/30/02

V - REVISION INFORMATION FOR PERMANENT CHANGES

Post Typing Review (print/sign) _____ Date 11/27/02
 Indicates temporary change(s) incorporated exactly as approved and no other changes made to document.

Incorporated into Revision Number _____ Effective Date _____

TEMPORARY CHANGE AFFECTED MANUAL LOCATION

Procedure Number AOP 3 Revision 4 Unit PB1
 Title Steam Generator Tube Leak
 Temporary Change Number 2002-0840

I - IMMEDIATELY AFTER INITIAL APPROVAL ON PBF-0026e (Non-Intent changes)
 (after Final Approval if change of intent involved)

This procedure change has been processed as follows: (Manual/Location)	Date Performed
<input type="checkbox"/> Copy included in work package for field implementation. (WO No. _____)	
<input checked="" type="checkbox"/> Copy filed in Control Room temp change binder (Operations only).	10-30-02
<input checked="" type="checkbox"/> Original change package provided to <u>TGV</u> to obtain Procedure Owner Review (e.g., Owner review may be coordinated by In-Group OA II, Procedure Writer, Procedure Supervisor, etc.).	10-30-02
<input type="checkbox"/>	

Performed By (print and sign) Carol Schroeder *Carol Schroeder* Date 10/30/2002

II - PROCEDURE OWNER REVIEW ON PBF-0026e
 (may be performed by OA II, Procedure Writer, etc.)

This procedure change has been processed as follows: (Manual/Location)	Date Performed
<input checked="" type="checkbox"/> Copy sent to Document Control Distribution Lead for Master File. (Not required for one-time use change)	10-30-02
<input type="checkbox"/> Copy filed in Group satellite file. (Not required for one-time use changes)	
<input type="checkbox"/> Copy filed in Group one-time use file.	
<input checked="" type="checkbox"/> Original Temp Change provided to <u>DGD</u> to obtain Final Approvals (e.g., final approval may be coordinated by In-Group OA II, Procedure Writer, Procedure Supervisor, etc.)	10-30-02
<input checked="" type="checkbox"/> U1/U2	10-30-02
<input checked="" type="checkbox"/> PAB	↓
<input checked="" type="checkbox"/> OPS Shop	
<input checked="" type="checkbox"/> OPS Office	
<input checked="" type="checkbox"/> Simulator (Training OAI)	
<input type="checkbox"/>	

Performed By (print and sign) Carol Schroeder *Carol Schroeder* Date 10/30/2002

Title of Proposed Activity: AFW minimum flow requirement change to AOP, EOP, CSP, ECA, SEP, OI-62 A/B procedures

Associated Reference(s) #: Removal of internals from AF-117 and upgrade open function of AFW pumps minirecirc valves to safety-related (MR 02-029); SCR 2002-005-01 EOP/ARP actions for AFW mini-recirc requirement; 2002-0055, P-38A/B mini recirc flow orifice replacment (MR 99-029 *A, *B); Flowserve Corporation Pump Division letter dated March 2, 20012; CAP 29908; CAP 29952

Prepared by: Eric A. Schmidt / John P. Schroeder
Name (Print)

Eric A. Schmidt / John P. Schroeder Date: 10/24/02
Signature

Reviewed by: KS 10/29/02
Name (Print)

[Signature] Date: 10/29/02
Signature

PART I (50.59/72.48) - DESCRIBE THE PROPOSED ACTIVITY AND SEARCH THE PLANT AND ISFSI LICENSING BASIS (Resource Manual 5.3.1)

NOTE: The "NMC 10 CFR 50.59 Resource Manual" (Resource Manual) and NEI 96-07, Appendix B, Guidelines for 10 CFR 72.48 Implementation should be used for guidance to determine the proper responses for 10 CFR 50.59 and 10 CFR 72.48 screenings.

I.1 Describe the proposed activity and the scope of the activity being covered by this screening. (The 10 CFR 50.59 / 72.48 review of other portions of the proposed activity may be documented via the applicability and pre-screening process requirements in NP 5.1.8.) Appropriate descriptive material may be attached.

This screening supports procedural upgrades to address the Auxiliary Feedwater (AFW) System issue as identified in CAP 29908 and CAP 29952. Procedural guidance for operation of AFW System will be changed such that the operator must ensure that discharge flow for P-38 A/B must be greater than 50 gpm and 1/2 P-29 discharge flow must be greater than 75 gpm. If pump flow cannot be maintained within these requirements, the pump must be secured.

I.2 Search the PBNP Current Licensing Basis (CLB) as follows: Final Safety Analysis Report (FSAR), FSAR Change Requests (FCRs) with assigned numbers, the Fire Protection Evaluation Report (FPER), the CLB (Regulatory) Commitment Database, the Technical Specifications, the Technical Specifications Bases, and the Technical Requirements Manual. Search the ISFSI licensing basis as follows: VSC-24 Safety Analysis Report, the VSC-24 Certificate of Compliance, the CLB (Regulatory) Commitment Database, and the VSC-24 10 CFR 72.212 Site Evaluation Report. Describe the pertinent design function(s), performance requirements, and methods of evaluation for both the plant and for the cask/ISFSI as appropriate. Identify where the pertinent information is described in the above documents (by document section number and title). (Resource Manual 5.3.1 and NEI 96-07, App. B, B.2)

FSAR 10.2 Auxiliary Feedwater System (AF) - The AFW system shall automatically start and deliver adequate AFW flow to maintain adequate steam generator levels during accidents which may result in main steam safety valve opening, such as: Loss of normal feedwater (LONF) and Loss of all AC power to the station auxiliaries (LOAC). AFW system shall also deliver sufficient flow to the steam generators supporting rapid cooldown during such accidents as: steam generator tube rupture (SGTR) and main steam line break (MSLB).

Each pump has an AOV controlled recirculation line back to the condensate storage tanks to ensure minimum flow to prevent hydraulic instabilities and dissipate pump heat.

TS 3.7.5 Auxiliary Feedwater (AFW) System

TS Bases B 3.7.5 Auxiliary Feedwater (AFW) System

FSAR 7.3.3.4 Manual AFW Flow Control During Plant Shutdown Manual control of steam generator water level using the AF pumps to remove reactor decay and sensible heat.

FPER 6.6.4 Auxiliary Feedwater System The Auxiliary Feedwater Pumps are provided with a mini-recirc line to ensure a minimum amount of flow is established to keep the pumps from dead heading.

FSAR 10.2 Auxiliary Feedwater System (AF)
TS 3.7.5 Auxiliary Feedwater (AFW) System
TS Bases B 3.7.5 Auxiliary Feedwater (AFW) System
FSAR 7.3.3.4 Manual AFW Flow Control During Plant Shutdown
FPER 6.6.4 Auxiliary Feedwater System

I.3 Does the proposed activity involve a change to any Technical Specification? Changes to Technical Specifications require a License Amendment Request (Resource Manual Section 5.3.1.2).

Technical Specification Change : Yes No

If a Technical Specification change is required, explain what the change should be and why it is required.

I.4 Does the proposed activity involve a change to the terms, conditions or specifications incorporated in any VSC-24 cask Certificate of Compliance (CoC)? Changes to a VSC-24 cask Certificate of Compliance require a CoC amendment request.

Yes No

If a storage cask Certificate of Compliance change is required, explain what the change should be and why it is required.

10 CFR 50.59 SCREENING

PART II (50.59) - DETERMINE IF THE CHANGE INVOLVES A DESIGN FUNCTION (Resource Manual 5.3.2)

Compare the proposed activity to the relevant CLB descriptions, and answer the following questions:

YES	NO	QUESTION
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the proposed activity involve Safety Analyses or structures, systems and components (SSCs) credited in the Safety Analyses?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Does the proposed activity involve SSCs that support SSC(s) credited in the Safety Analyses?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the proposed activity involve SSCs whose failure could initiate a transient (e.g., reactor trip, loss of feedwater, etc.) or accident, <u>OR</u> whose failure could impact SSC(s) credited in the Safety Analyses?
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does the proposed activity involve CLB-described SSCs or procedural controls that perform functions that are required by, or otherwise necessary to comply with, regulations, license conditions, orders or technical specifications?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Does the activity involve a <i>method of evaluation</i> described in the FSAR?
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is the activity a <i>test or experiment</i> ? (i.e., a non-passive activity which gathers data)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Does the activity exceed or potentially affect a <i>design basis limit for a fission product barrier (DBLFPB)</i> ? (NOTE: If <u>THIS</u> questions is answered <u>YES</u> , a 10 CFR 50.59 Evaluation is required.)

If the answers to ALL of these questions are NO, mark Part III as not applicable, document the 10 CFR 50.59 screening in the conclusion section (Part IV), then proceed directly to Part V - 10 CFR 72.48 Pre-screening Questions.

. any of the above questions are marked YES, identify below the specific design function(s), method of evaluation(s) or DBLFPB(s) involved.

MR-02-029 upgraded the open function of the AFW pumps mini-recirc AOV to safety-related. The safety-related boundary includes the recirc orifice and all associated upstream components and piping. It is postulated that a failure of the piping downstream of the recirc orifice will not have any adverse effects on the AFW system. The availability of the recirculation flowpath provides an additional flowpath to support minimum flow requirements. This procedure change will improve the reliability of the AFW pumps by not relying upon the recirc flow path for operability as it has been concluded that the restrictions in the recirc orifice may not be adequate for use. Whereas current guidance mandates that the operator verify the position of the recirc AOV and the status of the Instrument Air system, these procedural changes will only require the operator to monitor pump discharge flow.

PART III (50.59) - DETERMINE WHETHER THE ACTIVITY INVOLVES ADVERSE EFFECTS (Resource Manual 5.3.3)

If ALL the questions in Part II are answered NO, then Part III is NOT APPLICABLE.

Answer the following questions to determine if the activity has an *adverse effect* on a design function. Any YES answer means that a 10 CFR 50.59 Evaluation is required; EXCEPT where noted in Part III.3.

III.1 CHANGES TO THE FACILITY OR PROCEDURES

YES NO QUESTION

Does the activity adversely affect the *design function* of an SSC credited in safety analyses?

Does the activity adversely affect the method of performing or controlling the *design function* of an SSC credited in the safety analyses?

If any answer is YES, a 10 CFR 50.59 Evaluation is required. If both answers are NO, describe the basis for the conclusion (attach additional discussion as necessary):

Minimum flow requirements will be maintained within recommendations from the vendor by monitoring pump discharge flow and securing the pump as required. Starting and stopping of the AFW pumps has been previously evaluated in 50.59 Evaluation 2002-005, which addressed procedural changes to reduce the potential of pump damage as a result of the loss of the recirculation flow path.

III.2 CHANGES TO A METHOD OF EVALUATION

(If the activity does not involve a method of evaluation, these questions are NOT APPLICABLE.)

YES NO QUESTION

Does the activity use a revised or different method of evaluation for performing safety analyses than that described in the CLB?

Does the activity use a revised or different method of evaluation for evaluating SSCs credited in safety analyses than that described in the CLB?

If any answer is YES, a 10 CFR 50.59 Evaluation is required. If both answers are NO, describe the basis for the conclusion (attach additional discussion, as necessary).

III.3 TESTS OR EXPERIMENTS

If the activity is not a test or experiment, the questions in III.3.a and III.3.b are NOT APPLICABLE.

a. Answer these two questions first:

YES NO QUESTION

Is the proposed test or experiment bounded by other tests or experiments that are described in the CLB?

Are the SSCs affected by the proposed test or experiment isolated from the facility?

If the answer to **BOTH** questions in V.3.a is **NO**, continue to III.3.b. If the answer to **EITHER** question is **YES**, then describe the basis.

b. Answer these additional questions **ONLY** for tests or experiments which do **NOT** meet the criteria given in III.3.a above. If the answer to either question in III.3.a is **YES**, then these three questions are **NOT APPLICABLE**.

YES	NO	QUESTION
<input type="checkbox"/>	<input type="checkbox"/>	Does the activity utilize or control an SSC in a manner that is outside the reference bounds of the design bases as described in the CLB?
<input type="checkbox"/>	<input type="checkbox"/>	Does the activity utilize or control an SSC in a manner that is inconsistent with the analyses or descriptions in the CLB?
<input type="checkbox"/>	<input type="checkbox"/>	Does the activity place the facility in a condition not previously evaluated or that could affect the capability of an SSC to perform its intended functions?

If any answer in III.3.b is **YES**, a 10 CFR 50.59 Evaluation is required. If the answers in III.3.b are **ALL NO**, describe the basis for the conclusion (attach additional discussion as necessary):

Part IV - 10 CFR 50.59 SCREENING CONCLUSION (Resource Manual 5.3.4).

Check all that apply:

A 10 CFR 50.59 Evaluation is required or **NOT** required.

A Point Beach FSAR change is required or **NOT** required. If an FSAR change is required, then initiate an FSAR Change Request (FCR) per NP 5.2.6.

A Regulatory Commitment (CLB Commitment Database) change is required or **NOT** required. If a Regulatory Commitment Change is required, initiate a commitment change per NP 5.1.7.

A Technical Specification Bases change is required or **NOT** required. If a change to the Technical Specification Bases is required, then initiate a Technical Specification Bases change per NP 5.2.15.

A Technical Requirements Manual change is required or **NOT** required. If a change to the Technical Requirements Manual is required, then initiate a Technical Requirements Manual change per NP 5.2.15.

10 CFR 72.48 SCREENING

NOTE: NEI 96-07, Appendix B, Guidelines for 10 CFR 72.48 Implementation should be used for guidance to determine the proper responses for 72.48 screenings.

PART V (72.48) - 10 CFR 72.48 INITIAL SCREENING QUESTIONS

Part V determines if a full 10 CFR 72.48 screening is required to be completed (Parts VI and VII) for the proposed activity.

YES	NO	QUESTION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Does the proposed activity involve IN ANY MANNER the dry fuel storage cask(s), the cask transfer/transport equipment, any ISFSI facility SSC(s), or any ISFSI facility monitoring as follows: Multi-Assembly Sealed Basket (MSB), MSB Transfer Cask (MTC), MTC Lifting Yoke, Ventilated Concrete Cask (VCC), Ventilated Storage Cask (VSC), VSC Transporter (VCST), ISFSI Storage Pad Facility, ISFSI Storage Pad Data/Communication Links, or PPCS/ISFSI Continuous Temperature Monitoring System?

- Does the proposed activity involve IN ANY MANNER SSC(s) installed in the plant specifically added to support cask loading/unloading activities, as follows: Cask Dewatering System (CDW), Cask Reflood System (CRF), or Hydrogen Monitoring System?
- Does the proposed activity involve IN ANY MANNER SSC(s) needed for plant operation which are also used to support cask loading/unloading activities, as follows: Spent Fuel Pool (SFP), SFP Cooling and Filtration (SF), Primary Auxiliary Building Ventilation System (VNPAB), Drumming Area Ventilation System (VNDRM), RE-105 (SFP Low Range Monitor), RE-135 (SFP High Range Monitor), RE-221 (Drumming Area Vent Gas Monitor), RE-325 (Drumming Area Exhaust Low-Range Gas Monitor), PAB Crane, SFP Platform Bridge, Truck Access Area, or Decon Area?
- Does the proposed activity involve a change to Point Beach CLB design criteria for external events such as earthquakes, tornadoes, high winds, flooding, etc.?
- Does the activity involve plant heavy load requirements or procedures for areas of the plant used to support cask loading/unloading activities?
- Does the activity involve any potential for fire or explosion where casks are loaded, unloaded, transported or stored?

If ANY of the Part V questions are answered YES, then a full 10 CFR 72.48 screening is required and answers to the questions in Part VI and Part VII are to be provided. If ALL the questions in Part V are answered NO, then check Parts VI and VII as not applicable. Complete Part VIII to document the conclusion that no 10 CFR 72.48 evaluation is required.

PART VI (72.48) - DETERMINE IF THE CHANGE INVOLVES A ISFSI LICENSING BASIS DESIGN FUNCTION

(If ALL the questions in Part V are NO, then Part VI is NOT APPLICABLE.)

Compare the proposed activity to the relevant portions of the ISFSI licensing basis and answer the following questions:

- | YES | NO | QUESTION |
|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the proposed activity involve cask/ISFSI Safety Analyses or plant/cask/ISFSI structures, systems and components (SSCs) credited in the Safety Analyses? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the proposed activity involve plant, cask or ISFSI SSCs that support SSC(s) credited in the Safety Analyses? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the proposed activity involve plant, cask or ISFSI SSCs whose function is relied upon for prevention of a radioactive release, <u>OR</u> whose failure could impact SSC(s) credited in the Safety Analyses? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the proposed activity involve cask/ISFSI described SSCs or procedural controls that perform functions that are required by, or otherwise necessary to comply with, regulations, license conditions, CoC conditions, or orders? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the activity involve a <i>method of evaluation</i> described in the ISFSI licensing basis? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Is the activity a <i>test or experiment</i> ? (i.e., a non-passive activity which gathers data) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does the activity exceed or potentially affect a cask <i>design basis limit for a fission product barrier (DBLFPB)</i> ? (NOTE: If <u>THIS</u> questions is answered <u>YES</u> , a 10 CFR 72.48 Evaluation is required.) |

If the answers to ALL of these questions are NO, mark Parts VII as not applicable, and document the 10 CFR 72.48 screening in the conclusion section (Part VIII).

If any of the above questions are marked YES, identify below the specific design function(s), method of evaluation(s) or DBLFPB(s) involved.

PART VII (72.48) - DETERMINE WHETHER THE ACTIVITY INVOLVES ADVERSE EFFECTS (NEI 96-07, Appendix B, Section B.4.2.1)

(If ALL the questions in Part V or Part VI are answered NO, then Part VII is NOT APPLICABLE.)

Answer the following questions to determine if the activity has an *adverse effect* on a design function. Any YES answer means that a 10 CFR 72.48 Evaluation is required; EXCEPT where noted in Part VII.3.

VII.1 Changes to the Facility or Procedures

YES NO QUESTION

Does the activity adversely affect the *design function* of a plant, cask, or ISFSI SSC credited in safety analyses?

Does the activity adversely affect the method of performing or controlling the *design function* of a plant, cask, or ISFSI SSC credited in the safety analyses?

If any answer is YES, a 10 CFR 72.48 Evaluation is required. If both answers are NO, describe the basis for the conclusion (attach additional discussion, as necessary):

VII.2 Changes to a Method of Evaluation

(If the activity does not involve a method of evaluation, these questions are NOT APPLICABLE.)

YES NO QUESTION

Does the activity use a revised or different method of evaluation for performing safety analyses than that described in a cask SAR?

Does the activity use a revised or different method of evaluation for evaluating SSCs credited in safety analyses than that described in a cask SAR?

If any answer is YES, a 10 CFR 72.48 Evaluation is required. If both answers are NO, describe the basis for the conclusion (attach additional discussion, as necessary):

VII.3 Tests or Experiments

(If the activity is not a test or experiment, the questions in VII.3.a and VII.3.b are NOT APPLICABLE.)

a. Answer these two questions first:

YES NO QUESTION

Is the proposed test or experiment bounded by other tests or experiments that are described in the cask ISFSI licensing basis?

Are the SSCs affected by the proposed test or experiment isolated from the cask(s) or ISFSI facility?

If the answer to both questions is NO, continue to VII.3.b. If the answer to EITHER question is YES, then briefly describe the basis.

b. Answer these additional questions ONLY for tests or experiments which do not meet the criteria given in VII.3.a above. If the answer to either question in VII.3.a is YES, then these three questions are NOT APPLICABLE:

Point Beach Nuclear Plant
10 CFR 50.59/72.48 SCREENING (NEW RULE)

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Verify SCR number on all pages
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YES	NO	QUESTION
<input type="checkbox"/>	<input type="checkbox"/>	Does the activity utilize or control an SSC in a manner that is outside the reference bounds of the design bases as described in the ISFSI licensing basis?
<input type="checkbox"/>	<input type="checkbox"/>	Does the activity utilize or control a plant, cask or ISFSI facility SSC in a manner that is inconsistent with the analyses or descriptions in the ISFSI licensing basis?
<input type="checkbox"/>	<input type="checkbox"/>	Does the activity place the cask or ISFSI facility in a condition not previously evaluated or that could affect the capability of a plant, cask, or ISFSI SSC to perform its intended functions?

If any answer in VII.3.b is YES, a 10 CFR 72.48 Evaluation is required. If the answers are all NO, describe the basis for the conclusion (attach additional discussion as necessary):

PART VIII - DOCUMENT THE CONCLUSION OF THE 10 CFR 72.48 SCREENING

Check all that apply:

A 10 CFR 72.48 Evaluation is required or NOT required. Obtain a screening number and provide the original to Records Management regardless of the conclusion of the 50.59 or 72.48 screening.

A VSC-24 cask Safety Analysis Report change is required or NOT required. If a VSC-24 cask SAR change is required, then contact the Point Beach Dry Fuel Storage group supervisor.

A Regulatory Commitment (CLB Commitment Database) change is required or NOT required. If a Regulatory Commitment Change is required, initiate a commitment change per NP 5.1.7.

A change to the VSC-24 10 CFR 72.212 Site Evaluation Report is required or NOT required. If a VSC-24 10 CFR 72.212 Site Evaluation Report change is required, then contact the Point Beach Dry Fuel Storage group supervisor.

STEAM GENERATOR TUBE LEAK

A. PURPOSE

1. This procedure provides guidance to identify the leaking steam generator, control the spread of contamination, perform a plant shutdown, isolate the leaking steam generator, and stop the leak by equalizing RCS and steam generator pressure.
2. This procedure is applicable when RCS hot leg temperature is greater than or equal to 350°F with SI accumulators in service.

B. SYMPTOMS OR ENTRY CONDITIONS

1. The following are symptoms of a steam generator tube leak:
 - a. Any of the following area and process radiation monitors alert or high alarm:
 - o 1RE-215, Air ejector radiation
 - o 1RE-219, Steam generator blowdown radiation
 - o 1RE-222, Steam generator blowdown tank radiation
 - o 1RE-231, Steam line "A" radiation
 - o 1RE-232, Steam line "B" radiation
 - o RE-225, Combined air ejector radiation
 - b. Rise in charging pump speed.
 - c. Feedwater flow lowering with steam generator level stable or rising.
 - d. Unexpected steam generator level deviation alarms.
 - e. Steam generator level rising with no change in auxiliary feedwater flow.
 - f. Steam generator chemistry samples of abnormal activity or the abnormal presence of boron.
2. This procedure may be entered from the following:
 - o AOP-1A Unit 1, REACTOR COOLANT LEAK
 - o PBF-2034, Control Room Shift Log Unit 1, when confirmed S/G tube leakage greater than 75 gpd or rate of change greater than 30 gpd within a 1 hour period.
 - o NP 3.2.4, Primary To Secondary Leak Rate Monitoring Program

C. REFERENCES

1. NP 3.2.4. Primary To Secondary Leak Rate Monitoring Program
2. EPRI TR-104788. PWR Primary-To-Secondary Leak Guidelines
3. Commitment Change Evaluation CCE 2001-009 to VPND-87-510 Letter to NRC dated November 20, 1987 as revised by CCE #1999-008.

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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NOTES

- Foldout page shall be monitored throughout this procedure.
- Due to Improved Technical Specifications (ITS) implementation, in order to allow use of this procedure prior to and after implementation, both the Custom and Improved Technical Specification information is shown, with the ITS information in braces.
 Example CTS info {ITS info}

- | | |
|--|---|
| <p>1 Check Safety Injection Not Required:</p> <ul style="list-style-type: none"> • PZR level - WITHIN 10% OF PROGRAM LEVEL <p style="text-align: center;"><u>AND</u></p> <ul style="list-style-type: none"> • RCS subcooling - GREATER THAN 30°F • 1TI-970 • 1TI-971 | <p>Perform the following:</p> <ul style="list-style-type: none"> a. Manually trip reactor. b. Manually initiate safety injection. c. Manually initiate containment isolation. d. Go to <u>EOP-0 Unit 1, REACTOR TRIP OR SAFETY INJECTION.</u> |
|--|---|

- | | |
|--|--|
| <p>* 2 Check Reactor Trip Not Required:</p> <ul style="list-style-type: none"> * a. Check reactor - CRITICAL * b. Check charging pump suction - ALIGNED TO VCT | <ul style="list-style-type: none"> a. Go to <u>Step 3.</u> b. Perform the following: <ul style="list-style-type: none"> 1) Manually trip reactor. 2) Stabilize plant conditions using EOPs while continuing with this procedure. 3) Go to <u>EOP-0 Unit 1, REACTOR TRIP OR SAFETY INJECTION.</u> |
|--|--|

- | | |
|---|---|
| <p>* 3 Check PZR Level - STABLE AT OR TRENDING TO PROGRAM LEVEL</p> | <p><u>IF</u> PZR level trending lower, <u>THEN</u> perform the following:</p> <ul style="list-style-type: none"> a. Control charging flow as necessary to maintain PZR level. b. <u>IF</u> PZR level continues to lower, <u>THEN</u> isolate letdown. |
|---|---|

POINT BEACH NUCLEAR PLANT
ABNORMAL OPERATING PROCEDURE

STEAM GENERATOR TUBE LEAK

AOP-3 Unit 1
SAFETY RELATED
Revision 4 11/8/2001
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STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
4	Check PZR Pressure - STABLE AT OR TRENDING TO DESIRED PRESSURE	<p><u>IF</u> PZR pressure trending lower. <u>THEN</u> perform the following:</p> <p>a. Ensure spray valves shut.</p> <ul style="list-style-type: none">• Normal spray valves<ul style="list-style-type: none">• 1PCV-431A• 1PCV-431B• Auxiliary spray valve<ul style="list-style-type: none">• 1CV-296 <p>b. Operate PZR heaters as necessary to establish PZR pressure at program.</p>
5	.Check Reactor Makeup Control: <ul style="list-style-type: none">• Makeup set at proper boric acid concentration• Makeup armed and in auto	Initiate manual makeup as necessary to maintain VCT level between 17% and 56%.
6	Notify DCS, Chemistry. And Implement Emergency Plan	

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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*****
* 7 Identify Leaking S/G:
*
*   o Abnormal S/G sample results
*
*   o Boric acid
*
*   o activity
*
*   o pH
*
*   o High main steam line radiation
*
*     • 1RE-231 for S/G A
*     • 1RE-232 for S/G B
*
*   o Unexpected S/G level deviation
*     alarms
*
*   o Unexpected rise in any S/G level
*
*   o Isolate S/G sample valves one at a
*     time and check blowdown activity
*     for trends
*
*     • 1MS-2083 for S/G A
*     • 1MS-2084 for S/G B
*****
  
```

- 8 Determine Leak Rate:
- o Direct Chemistry to perform
 CAMP 014, STEAM GENERATOR TUBE
 LEAK RATE CALCULATION
 - o PBF-2034, Control Room Shift Log
 Unit 1
 - o OI-55, PRIMARY LEAK RATE
 CALCULATION

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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NOTE

Primary to secondary steam generator leakage in excess of 500 gpd in either steam generator will place Unit 1 in CTS 15.3.1.D.4 (ITS 3.4.13. RCS Operational Leakage).

- 9 Check Reactor Shutdown Required: Go to NP 3.2.4, PRIMARY TO SECONDARY LEAK RATE MONITORING PROGRAM.
- Confirmed leakage - GREATER THAN OR EQUAL TO 75 GPD

CAUTION

Action response time clock starts when the first RMS monitor indicates a tube leak has developed.

* 10 Determine Action Response Based On
 * S/G Leakage:
 *

S/G LEAKAGE		ACTION RESPONSE
Greater than or equal to 75 gpd	<u>AND</u>	Greater than or equal to 30 gpd/hr
		Reduce power to less than or equal to 50% in one hour
		<u>AND</u>
		Be in HSD (Mode 3) in next two hours
Greater than or equal to 75 gpd and sustained for greater than or equal to 1 hour	<u>AND</u>	Less than 30 gpd/hr
		Be in HSD (Mode 3) in less than or equal to 24 hours
Greater than or equal to 150 gpd	<u>AND</u>	Less than 30 gpd/hr
		Be in HSD (Mode 3) in less than or equal to six hours

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
11	Place Unit In HSD {ITS MODE 3} o OP-3A, POWER OPERATION TO HOT SHUTDOWN <u>OR</u> o AOP-17A, RAPID POWER REDUCTION	
12	Notify Chemistry Of Leak Rate And Rate Of Change	
13	Monitor Leakage Every 15 Minutes	
14	Direct Radiation Protection To Perform Exposure And Contamination Evaluations	
15	Check Leaking S/G - IDENTIFIED	Perform the following: a. Continue with plant shutdown. b. <u>WHEN</u> leaking S/G identified, <u>THEN</u> continue with Step 16.

NOTE

Step 16 through Step 26 align systems to control the spread of contamination. These steps may be performed in any order.

- 16 Adjust Affected S/G Atmospheric Steam Dump Controller To 1050 psig
- o 1HC-468 for S/G A
- OR
- o 1HC-478 for S/G B

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
17	Isolate Blowdown On Affected Steam Generator o S/G A • 1MS-5958 • 1MS-2042 <u>OR</u> o S/G B • 1MS-5959 • 1MS-2045	
18	Shut Affected Steam Generator Sample Isolation Valve o 1MS-2083 for S/G A <u>OR</u> o 1MS-2084 for S/G B	
19	Ensure Condensate Storage Tank Isolated From Condenser Hotwell: a. Ensure condenser reject level control valve shut • 1CS-2130 b. Ensure condenser reject control bypass valve shut • 1CS-113	a. <u>IF</u> valve can <u>NOT</u> be manually shut, <u>THEN</u> locally shut upstream isolation valve. • 1CS-112
20	Locally Align Low Pressure Trap Header To Condenser: a. Check condenser available b. Open low pressure trap header inlet to condenser • 1MS-164 c. Shut low pressure trap header inlet to atmospheric blowoff tank • 1MS-165	a. Go to <u>Step 21</u> .

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
21	Locally Isolate Building Heating Steam Supply:	
	a. Check Unit 2 available to supply heating steam	a. Perform the following:
		1) Secure boric acid evaporators.
		2) Startup house heating boilers per OI-63. HEATING BOILER OPERATION.
	b. Place heating steam control valve selector switch to 9 o'clock (unlabeled) position	
22	Locally Shift Air Ejector After Condenser Drains To Hotwell:	
	a. Open air ejector after condenser drain trap inlet	
	• 1FD-125	
	b. Open air ejector after condenser drain trap outlet	
	• 1FD-126	
	c. Shut air ejector after condenser drain bypass	
	• 1FD-124	
	d. Shut air ejector after condenser drain to funnel	
	• 1FD-124A	
23	Isolate Turbine Building Sumps:	
	a. Open turbine building sump pump breakers	
	• 1B52-116H for 1P-64A	
	• 1B52-116K for 1P-64B	
	• 1B52-413B for 1P-65A	
	• 1B52-413D for 1P-65B	
	b. Secure drains to turbine building sumps	

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
24	<p>Shut Known Steam Release Paths To Clean Side:</p> <ul style="list-style-type: none">• Ensure affected MSIV Bypass Valve shut<ul style="list-style-type: none">◦ 1MS-234 for S/G A<li style="text-align: center;"><u>OR</u>◦ 1MS-236 for S/G B• Locally ensure S/G Header Bypass Drains are shut and capped<ul style="list-style-type: none">• 1MS-123A• 1MS-120A• Locally ensure upstream drains to blowdown tank are shut<ul style="list-style-type: none">• 1MS-229• 1MS-239• Locally ensure the following elbow vents are shut:<ul style="list-style-type: none">• HP Turbine Steam Supply Inlet PX-2025<ul style="list-style-type: none">• 1MS-10A• 1MS-10B• HP Turbine Steam Supply PX-2024<ul style="list-style-type: none">• 1MS-15A• 1MS-15B	
25	Check Radwaste Steam Aligned To Unit 2	<p>Perform the following:</p> <ul style="list-style-type: none">a. Locally align radwaste steam to Unit 2 per OI-18A, SHIFTING RADWASTE STEAM SUPPLIES.b. <u>IF</u> Unit 2 is shut down, <u>THEN</u> shut down strippers and blowdown evaporator and secure radwaste steam.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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NOTE

Shutting the steam supply valve to the turbine driven AFW pump will place Unit 1 in CTS 15.3.4.A (ITS 3.7.5, Auxiliary Feedwater).

- 26 Check If 1P-29 AFP/Radwaste Steam Isolation Valve From Affected Steam Generator Can Be Shut:
- a. Check either of the following completed:
 - o Radwaste steam aligned to Unit 2
 - OR
 - o Radwaste steam is secured
 - b. Locally shut 1P-29 AFP/radwaste steam isolation valve from affected S/G
 - o 1MS-235 for S/G A
 - OR
 - o 1MS-237 for S/G B
- 27 Check Change In Reactor Power - LESS THAN 15% IN ANY 1 HOUR Direct Chemistry to sample RCS for Iodine within 2 to 6 hours following the power change.
- 28 Check Reactor - SHUTDOWN WHEN reactor shutdown complete. THEN continue with Step 29.
- 29 Shut Main Steam Isolation Valve For Affected S/G
- o 1MS-2018 for S/G A
 - OR
 - o 1MS-2017 for S/G B

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
30	Locally Shut Affected Main Steam Trap Isolation Valve	
	o IMS-228 for S/G A	
	<u>OR</u>	
	o IMS-238 for S/G B	
31	Borate The RCS:	
	a. Borate RCS to establish either of the following:	
	o Establish a 1% shutdown margin (70°F to 350°F, ARI, Xenon free) per Rod 9 Column 3	
	<u>OR</u>	
	o Values specified by Reactor Engineering	
	b. Maintain PZR boron concentration within 50 ppm of RCS:	
	1) Energize all available PZR heaters	
	c. Check required RCS and PZR boron concentration established	c. DO NOT continue until boron concentration established.

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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CAUTION

Do not cooldown to less than 490°F until safety injection has been blocked.

32 Initiate Plant Cooldown To Between
490°F And 500°F:

a. Manually plot cooldown per
OI-105, RCS HEATUP/COOLDOWN
PLOTTING

b. Establish a cooldown rate of less
than 100°F/hr by dumping steam to
condenser

c. Maintain S/G levels between 60%
and 75%

d. Maintain PZR level at 30%:

1) Check RCS temperature less
than 540°F

2) In instrument rack 1C-107,
place Pressurizer Level
Programmer in manual

• TC-401C

3) Adjust controller output to
30%

b. Establish a cooldown rate of less
than 100°F/hr using atmospheric
steam dump on intact S/G.

1) WHEN RCS temperature less than
540°F, THEN do Step 32.d.2.
Continue with Step 33.

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
33	Depressurize RCS And Block SI:	
	a. Check SI BLOCKED status light - NOT LIT	a. Go to <u>Step 34</u> .
	b. Check RCS temperature - BETWEEN 490°F AND 500°F	b. OBSERVE CAUTION PRIOR TO STEP 32 and return to <u>Step 32</u> .
	c. Place PZR pressure controller in manual	
	d. Place one spray valve in manual and adjust as necessary to establish depressurization rate of less than 100 psig per minute.	d. Perform the following: 1) <u>IF</u> letdown in service, <u>THEN</u> establish a depressurization rate of less than 100 psig per minute using auxiliary spray. 2) <u>IF</u> letdown <u>NOT</u> in service, <u>THEN</u> consult with plant staff to determine alternate means of RCS depressurization. o PORV o PZR vents o Ambient losses
	e. Energize all banks of PZR heaters	
	f. Check RCS pressure - BETWEEN 1750 PSIG AND 1765 PSIG	f. Return to <u>Step 33.d</u> .
	g. Check Lo PZR Press Block SI permissive light - LIT	
	h. Block SI • Train A - BLOCKED • Train B - BLOCKED	

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
34	Continue To Depressurize RCS To Between 900 PSIG And 1100 PSIG:	
	a. Establish a depressurization rate of less than 100 psig per minute using normal spray and backup heaters	a. Perform the following:
		1) <u>IF</u> letdown in service, <u>THEN</u> establish a depressurization rate of less than 100 psig per minute using auxiliary spray and backup heaters.
		2) <u>IF</u> letdown <u>NOT</u> in service, <u>THEN</u> consult with plant staff to determine alternate means of RCS depressurization.
		o PORV o PZR vents o Ambient losses
	b. Check leaking S/G pressure - BETWEEN 900 PSIG AND 1100 PSIG	b. Go to <u>Step 35</u> .
	c. Reduce RCS pressure to equal leaking S/G pressure	
	d. Go to <u>Step 37</u>	
35	Continue Plant Cooldown To Between 370°F And 380°F:	
	a. Manually plot cooldown per OI-105, RCS HEATUP/COOLDOWN PLOTTING	
	b. Establish a cooldown rate of less than 100°F/hr by dumping steam to condenser	b. Establish a cooldown rate of less than 100°F/hr using atmospheric steam dump on intact S/G.
	c. Maintain S/G levels between 60% and 75%	
	d. Maintain PZR level at 30%	

STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
36	<p>Depressurize RCS To Match Leaking Steam Generator Pressure:</p> <p>a. Establish a depressurization rate of less than 100 psig per minute using normal spray and backup heaters</p> <p>b. Reduce RCS pressure to equal leaking S/G pressure</p>	<p>a. Perform the following:</p> <p>1) <u>IF</u> letdown in service, <u>THEN</u> establish a depressurization rate of less than 100 psig per minute using auxiliary spray and backup heaters.</p> <p>2) <u>IF</u> letdown <u>NOT</u> in service, <u>THEN</u> consult with plant staff to determine alternate means of RCS depressurization.</p> <ul style="list-style-type: none">o PORVo PZR ventso Ambient losses
37	<p>Check If SI Accumulators Should Be Isolated:</p> <p>a. Check RCS pressure - LESS THAN 1000 PSIG</p> <p>b. Restore power to both accumulator discharge MOVs</p> <ul style="list-style-type: none">• 1B52-324F for 1SI-841A• 1B52-424F for 1SI-841B <p>c. Shut both accumulator discharge MOVs</p> <ul style="list-style-type: none">• 1SI-841A, accumulator A• 1SI-841B, accumulator B <p>d. Remove power from both accumulator discharge MOVs</p> <ul style="list-style-type: none">• 1B52-324F for 1SI-841A• 1B52-424F for 1SI-841B	<p>a. Go to <u>Step 38</u>.</p>

POINT BEACH NUCLEAR PLANT
ABNORMAL OPERATING PROCEDURE

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SAFETY RELATED
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STEAM GENERATOR TUBE LEAK

STEP	ACTION/EXPECTED RESPONSE	RESPONSE NOT OBTAINED
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* 38 Maintain Stable Plant Conditions *
* *
* • RCS pressure - EQUAL TO LEAKING *
* S/G PRESSURE *
* *
* • RCS temperature - STABLE *

39 Consult With Plant Management To
Determine Long Term Corrective
Action

-END-