

OBSOLETE

Rev. 21

Effective Date 4/8/94

ANNUNCIATOR RESPONSE

AR-403

FLORIDA POWER CORPORATION

CRYSTAL RIVER UNIT 3

PSA W ANNUNCIATOR RESPONSE

THIS PROCEDURE ADDRESSES SAFETY RELATED COMPONENTS

APPROVED BY: Interpretation Contact

[Signature]
(SIGNATURE ON FILE)

DATE: 4/7/94

INTERPRETATION CONTACT: Manager Nuclear Plant Operations

PSA-2 ANNUNCIATOR RESPONSE	PSA-2-04-06	M-04-06
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MAKEUP TANK
PRESS.
HIGH/LOW

EVENT POINT 1062

INDICATED CONDITION:

- MAKEUP TANK PRESSURE > THE OVERPRESSURE VALUE CALCULATED BY THE PLANT COMPUTER.

REDUNDANT INDICATION WHICH WILL VERIFY ALARM:

- MJ-014-LIR1. MUT LEVEL/PRESSURE RECORDER.
- COMPUTER POINTS X359 AND X401.

OPERATOR ACTIONS FOR A VALID ALARM:

- ENSURE MUV-141, MUV-143 CLOSED
- REDUCE PRESSURE WITHIN LIMITS OF MAKEUP TANK PRESSURE/LEVEL CURVE OF OP-103B.

DISCUSSION:

THE VALUES OF THE COMPUTER POINTS ARE INPUT TO A CALCULATION WHICH ACTUATES THIS EVENT POINT WHEN MUT LEVEL/PRESSURE COMBINATION ARE BEING OPERATED IN THE UNACCEPTABLE REGION OF CURVE B OP-103B.

REFERENCES: DRAWING 20B-041-MU-47.

SENSING ELEMENT: COMPUTER POINT X359 AND X401

4.3.2.2 Annunciator Alarm Response (AR) Procedures

4.3.2.2.1 The purpose of the Annunciator alarm system is to warn the Operator of any abnormal conditions in monitored systems.

4.3.2.2.2 Operations personnel shall know the reason each illuminated annunciator in their area of responsibility is in alarm.

4.3.2.2.3 The Control Board Operators should announce receipt or clearing of annunciator alarms.

4.3.2.2.4 Annunciator Response Procedures (AR's) shall be utilized as follows:

1. Annunciator response procedures shall be used to diagnose alarms not expected (not directly related to intentional manipulation of plant controls), and for any alarm that the operators are not explicitly familiar with.
2. The Control Board Operators shall interpret and verify that annunciator alarm signals are consistent with plant conditions.

4.3.2.3 General Practices for Procedure Implementation

4.3.2.3.1 AI-400A, Description and General Administration of Plant Procedures, Section 4.1, Requirements for Approved Written Procedures, must be utilized to determine if a procedure is required for an EVOLUTION.

4.3.2.3.2 Written procedures are also needed for those EVOLUTIONS that would affect a change in the system flowpath or operating parameters.

- o The boundary between an "EVOLUTION" and a "TASK" may not always be clear and, as such, it is expected that plant operators will encounter situations where the adequacy of existing procedures may be questioned
 - a. In these instances, shift supervision will make the determination as to what procedural requirements are applicable.

4.3.2.3.3 For procedures performed by Plant Operations, the Shift Supervisor or his designee shall ensure the principles of Enclosure 19, Pre-Job Briefing Checklist, are met.

- o Using his judgement in regard to plant safety, the SSOO may elect to formally complete Enclosure 19, Pre-Job Briefing Checklist, for the applicable procedure

Pat & Gary's Expectations

CHALLENGE THE PROCESS

- Life is never static; strive to continuously improve how Nuclear Operations does business as a team and how your job is done individually.
- Develop the ability to criticize your own work and have the courage to face facts even those which may be "unpopular".
- Develop the capacity to learn from experience - yours and others. This requires objectivity and a willingness to admit mistakes so that costly or unsafe errors are not repeated.
- Seek to understand the reason(s) why things are done in a certain way - the reason(s) may no longer be valid.
- Be an innovator and initiator of needed change - avoid getting trapped by bureaucratic policy and the status quo.
- It's O.K. to question any "requirement" (including regulations and company policy) that doesn't make sense. Rigid and blind obedience is not in the best interest of nuclear safety.
- Avoid the traps of "biased thinking" and "pre-established value systems". They will rob you of the ability to see things clearly and achieve results.

TIME LINE - SEPTEMBER 5, 1994 MUT DRAWDOWN EVOLUTION

<u>Time</u>	<u>Action</u>
0400	Level raised to 83". Pressure increased to curve limit.
0425	Level raised to 86".
0447	Level decrease started - pressure exceeds limit.
0501	Level decrease stopped at 55".
0518	Level increase started.
0522	Pressure is back within limit as level is increased. Level is 59".
0533	Level increase is stopped at 80".
0648	MUT pressure is vented from 27 pounds to 21 pounds at 81" level.

Total Time MUT pressure exceeds limit = 37 minutes

PROBLEM REPORT

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PART 4: EVALUATION OF CAUSE, CAP, AND COMPLETION SCHEDULE BY THE QUALITY PROGRAMS TECHNICAL REVIEWER

(1) Comments:

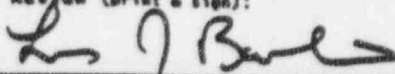
Based on a review of the Cause Analysis described in Part 3 Section A and a discussion with involved personnel, the Corrective Action Plan described in Part 3 B is considered acceptable.

Please forward documentation of the completion of each of the Corrective Plan Items to Quality Programs.

(2) Quality Programs Review (print & sign):

Date:

Louis J. Barbieri



10/5/84

PART 5: FINAL REVIEW OF COMPLETED CORRECTIVE ACTIONS BY THE QUALITY PROGRAMS TECHNICAL REVIEWER

(1) Comments:

(2) Quality Programs Final Package Review (print & sign):

Date:

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PART 2 - SECTION A1: REVIEW BY THE BOTA

(1) This Problem Report (PR) is:

REPORTABLE:
A TECHNICAL SPECIFICATION VIOLATION:
AN IMPLANTED RELEASE:

YES NO YES NO YES NO
YES YES YES

Standard 6 of this document is required if YES

* The responsible organization must be re-evaluated upon completion of the design back review done by engineering management. C. Butler called on 8-2-94.

BOTA (name & title): Walter S. Housner III

Date/Time: 8-2-94 1958

IF REPORTABLE, THEN COMPLETE PART 2 - SECTION B.

PART 2 - SECTION A2: PLANT CONDITIONS AND IMMEDIATE NOTIFICATIONS BY THE BOTA (if required)

(1) Plant Conditions:

Mode: 1

RE PUR: 10070

Mode: PP2

RE Temperature: 579

Pressure: 2.55

Outstanding Date: 9/3/94

Outstanding Time: 0319

Identified Date/Time: 8/16/94/17:15

Other (describe):

(2) Resource Equip Available:

N/A

(3) SP/Reins:

None

(4) Test Spec Affected:

None

(5) Action Statement Summary:

None

(6) Action Entry Date:

N/A

Time:

(7) Evaluate immediate notification (use SR-202 if Emergency Declared):

Emergency Plan Implemented: NO X YES

Classification: N/A

(8)

Phone Call Required

YES

NO

Time Limit

1 HOUR OR 4 HOUR

Organization

NRC OPERATIONS CENTER

NRC REGION 11

NRC OPERATIONS CENTER

NRC OPS CENTER/DHRS

NRC OPS CENTER

PFC SUPERVISOR, WATER PROGRAM

NRC OPS CENTER/PFC REL. VP/DRM

NRC REGION 11/PFC ENVIRONMENTAL SERVICES

NRC OPERATIONS CENTER/REL/PFC RISE

NRC OPERATION CENTER

PFC NUCLEAR SAFETY SPECIALIST

NRC OPERATIONS CENTER

CP-111 Reference

a. 10CFR50.72

b. 10CFR20.1906

c. 10CFR20.2201

d. 10CFR20.2202

e. 10CFR50.36

f. NRC PERMIT

g. TS 2.2.5

h. EPP

i. REL/PFC RISE

j. 10CFR50.52a

k. 29CFR1904.8

CP-141 Reference

a. 10CFR75.71

(9) NOTIFICATIONS:

NAME

TITLE

DATE/TIME

EVENT #

a. ESCO

D. Fields

SSOD

8/16/94/17:15

b. STATE

N/A

c. NRC(ENS)

Bill Hoffmann

11/16/94/17:55

28008

d. NRC (REG 11)

N/A

e. PFC

W.M. Marshall

NSM

8/16/94/17:14

f. DHRS

N/A

g. OTHER

R. Butcher

NRC accident

8/16/94/18:55

(10) NOTIFICATION OF THE BOTA COMPLETED: (X) YES () NO Performed by: AL

Date: 8/16/94

(11) BOTA (name & title):

Harvey H. Liles

Date & Time:

8/16/94 1858

PART 2 - SECTION B BSA COMMENTS/Recommendations

(12) Nuclear Shift Manager (print & sign):

Date/Time:

FORWARD THIS SECTION TO THE DIRECTOR, QUALITY PROGRAM

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PROBLEM REPORT

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PART 3 - ANALYSIS: FAILURE IDENTIFICATION AND CAUSE DETERMINATION

(1) Method of Performing Cause Analysis: ☒ Structured Analysis ☐ Deductive Logic

(2) CHECK ALL WHICH WILL APPLY:

Human Performance

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Verbal Communication | <input type="checkbox"/> Work Schedule | <input type="checkbox"/> Supervisory Methods | <input type="checkbox"/> Environmental Conditions |
| <input type="checkbox"/> Written Communication | <input type="checkbox"/> Work Organization/Planning | <input type="checkbox"/> Managerial Methods | <input type="checkbox"/> Interface Design or Equipment |
| <input type="checkbox"/> Training/Qualification | <input type="checkbox"/> Work Practices | <input type="checkbox"/> Change Management | <input type="checkbox"/> Scrutiny |
| | | <input type="checkbox"/> Resource Management | |

Equipment Performance

- | | | | |
|--|--|-----------------------------------|---|
| <input type="checkbox"/> Plant/System Operation | <input type="checkbox"/> Maintenance/Testing | <input type="checkbox"/> External | <input checked="" type="checkbox"/> Design Configuration/Analysis |
| <input type="checkbox"/> Equipment Spec/Wtg/Construction | | | |

(3a) Primary Cause(s):

Part 1 of this PR addresses two separate conditions with regard to Curve 6 of CP-1030. The first condition identified is presently being resolved by Corrective Action 8 from Part 3 - Section 6 of PR 94-0160. This action was originally scheduled for completion on 09/09/94, however, the due date has been extended to 09/20/94. The assigned organization for this corrective action is DOE/Brian Guthrie. The second condition identified in this PR calls into question the validity of the calculation used to generate Curve 6 and offers evidence that would seem to indicate that the curve may not be conservative in preventing gas binding of a Refueling Pump during a LOCA. At present, the validity of the existing "Maximum ISL Overpressure" limitation curve is uncertain. The corrective action assigned in Part 3B will identify any errors that might have been introduced when generating this limit curve. If errors are discovered, the reasons for these errors will be addressed at that time.

(3b) Secondary Cause(s): N/A

(3c) Contributing Factor(s): N/A

(4) SUPPORTING INFORMATION (IF APPLICABLE):

DOE LTR Number:	N/A	DOE PROGRAM Page:	CP-1030	CAUSE Number:	N/A	DOE TELETYPE Ref:	N/A
OTHER:	N/A						

(5) Nuclear Safety Consequences Analysis:

Not applicable because identified conditions were determined to be not reportable. The corrective action associated with this PR could determine that a design basis issue exists. At that time, it would become necessary to revisit the issue of reportability and to address the impact, if any, to the level of safety of the plant.

(6) Previous Similar Events/Conditions: None found.

(7) Manufacturer/Supplier Status: Not applicable.

(8) Nonconforming Equipment/Material Disposition:

- | | | | |
|---|--|----------------------------------|---------------------------------|
| <input checked="" type="checkbox"/> N/A no nonconforming equipment or material occurred | <input type="checkbox"/> Accept-As-Is* | <input type="checkbox"/> Repair* | <input type="checkbox"/> Rework |
| <input type="checkbox"/> Other (describe): | | | |

* Engineering Justification and Approval Required for these Dispositions (explain documentation and action)

(9) Maintenance Preventable Functional Failure (MPFF):

- | | | |
|--|----------------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> No | <input type="checkbox"/> INITIAL | <input type="checkbox"/> REPETITIVE |
|--|----------------------------------|-------------------------------------|

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PART 3 - SECTION 6 - Corrective Action Plan (CAP)

(1) Corrective Action Plan

ACTIONS	SCHEDULED COMPLETION DATE	RESPONSIBLE ORGANIZATION/INDIVIDUAL
NOTE: This revised CAP replaces the existing CAP for this PR.		
1) Evaluate/validate Curve 6 of OP-1032, "Minimum HLT Overpressure," to determine if the curve is technically correct and provides useful and meaningful guidance to the Control Room operators.	12/15/94	NEE/Joe Nasrati
a. Evaluate Calc. 100-0024 Rev. 5 to determine if technical errors exist. Identify reasons for observed errors. b. Revise the calculation to reflect the current plant configuration for GPI, including the transition point from the SHUT to the RB out. c. Issue revised/updated version of OP-1032, Curve 6.		
2) Determine if the guidance provided by the existing Curve 6 of OP-1032 resulted in operation outside the Design Basis of the plant at any time. If this PR is determined to be a Design Basis issue, ensure reusability of the identified conditions is revisited by Quality Operations.	11/10/94	NSA/Ean Scher
3) Challenge the validity of the 25 cc/kg limit on dissolved H_2 in the RCS. A 5 cc/kg reduction in this value could significantly reduce the complexity of this issue and the difficulty the Operators are experiencing in trying to maintain this limit while simultaneously meeting the LBLCA and Appendix 2 concerns.	11/10/94	Chemical/Terch Johnson
4) Determine if a plant modification is needed to minimize operator burden. This will be accomplished with input from OPE, Licensing, Operations and Design Engineering personnel. The final recommendation will be reviewed and concurred with by the Management Review Committee.	1/13/95	NEE/Joe Nasrati

(2) ADDITIONAL CAP INFORMATION: Prior to the issuance of this PR, efforts had been ongoing to investigate strategies for enhancing CRJ's ability to meet the minimum dissolved hydrogen requirement of 25 cc/kg while simultaneously reducing the operator burden. This revised CAP reflects the decision to utilize this PR to consolidate all efforts associated with this issue and to establish a point of accountability for tracking all elements of an overall problem resolution to acceptable endpoints.

(3) Developed by one(s): Philip E. Saltzman

Date: October 20, 1994

Philip E. Saltzman

(4) Responsible Organization Approved by one(s):

Walter Brown for D. Campbell

10-20-94

IF THE PROBLEM IS CLASSIFIED AS REPORTABLE OR A TECHNICAL SPECIFICATION VIOLATION, THE FOLLOWING APPROVALS ARE REQUIRED:

(a) PRC:

Kess Vogel

11-9-94

REQ 022

94-44

(b) SUPD:

E. H. H. H.

Date:

11/7/94

WHEN COMPLETE, TRANSMIT TO SUPERVISOR, QUALITY SYSTEMS.

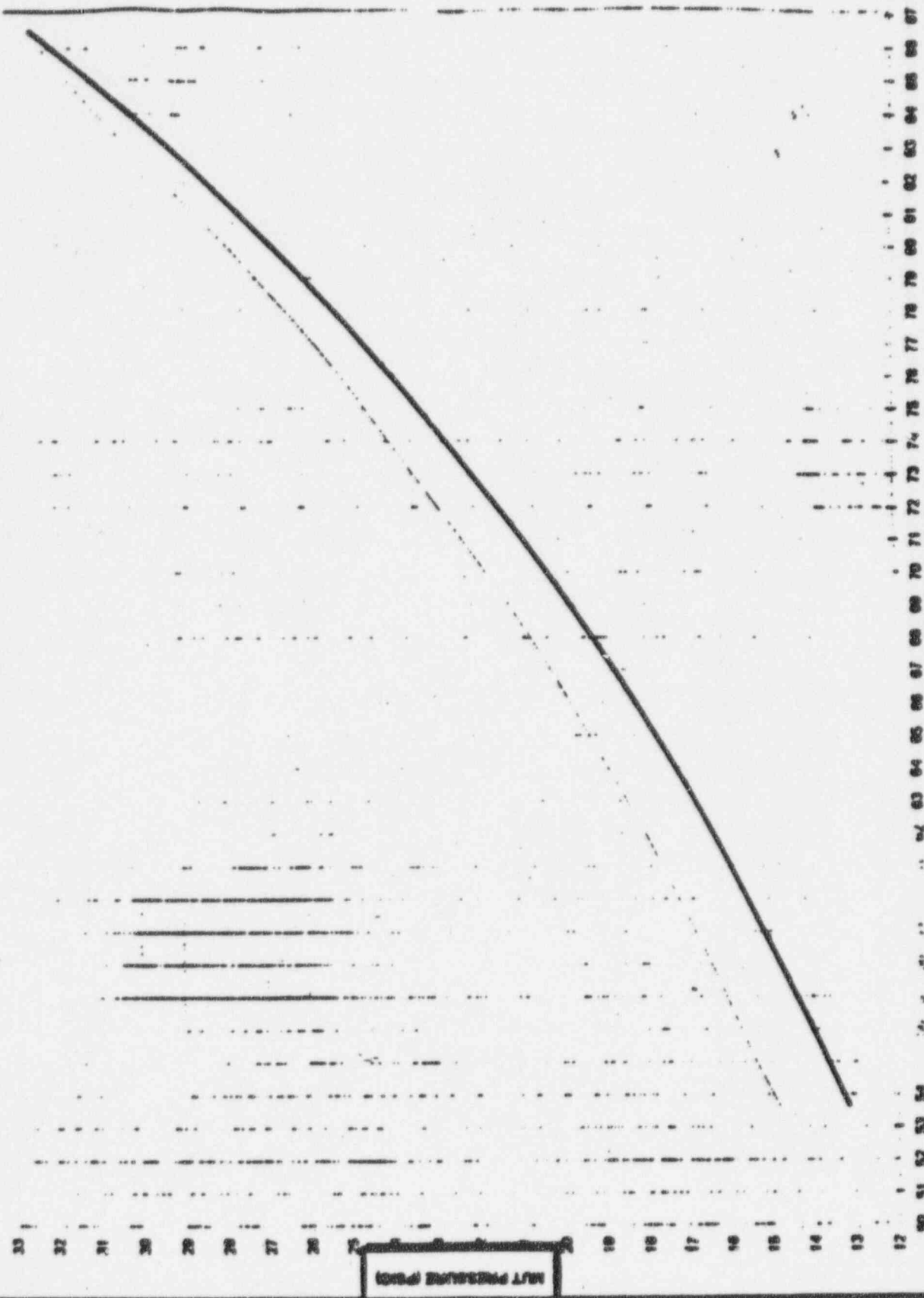
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996 11/9/94

MUT PRESSURE VS PRESSURE LIMIT

Limit
—
Press



MUT PRESSURE (PSIG)

PROBLEM REPORT		PR 94-0267	Page: 1
PART 1: DITATION, REVIEW, AND ISSUANCE OF THE PROBLEM REPORT BY THE ORIGINATING ORGANIZATION			
(1) Title: <u>RUT Pressure Limit Curve Technical Basis Inadequate</u>			
SUPPORTING INFORMATION			
(2a) Discovery Date:	1. Review of Calculation 190-0034 Rev 5. 2. Observation of RUT pressure response to depressuring event.		
(2b) Plant Condition:	Mode 1 100% Power Normal Operation		
(2c) Occurrence Date:	9/7/94	Time: 0010	
(2d) Plant Location	Building: N/A	Elevation: N/A	Area/Room: N/A
(2e) Equipment Tag Number(s):	RUT-1	(2f) Vendor Name:	Buffalo Tank Corporation
(3) Description of the Condition/Event:			
<p>OP-1038, Curve 8-"Maximum RUT Overpressure" limits the maximum amount of hydrogen overpressure that may be anticipated on the Safe-to-Low (SLT-1). The curve is derived from data generated by Calculation 190-0034 Rev 5. This calculation determines a "safe" overpressure at 55" RUT level that will ensure that gas entrainment in the hydrogen pump's suction will not occur. The curve is then generated by expanding and compressing the "safe" overpressure over the 0 to 100 inch range utilizing the Ideal Gas Law.</p> <p>1. Calculation 190-0034 Rev 5 Assumption 3 states that the RUT levels used to calculate static pressure in the suction line at the shutdown point are based on shutdown to 0% pump suction based on 0% level and not RUT level. The assumption states that this is valid through Refuel 6. The calculation has not been updated for our current ROP shutdown point of 25" RUT level when running 2 RUPs on the suction header (ROP-8 step 3.11). The calculation does not address the issue of running one RUP on the suction header down to a RUT level of 5" as required by ROP-8 step 3.10.</p> <p>2. Use of the Ideal Gas Law to generate the limit curve is nonconservative in this case. Observations of RUT pressure response during level depressures reveal that the pressure decreases at a slower rate than the limit curve does. The attached graph illustrates this response. RUT pressure was placed on the limit curve at a RUT level of 55". The system was allowed to stabilize for approximately 30 minutes. RUT level was then bled down to the low level setpoint of 25". During the bleed, RUT pressure entered the unacceptable region, and the difference between the limit and actual pressure increased throughout the entire level decrease. At a RUT level of 55" RUT pressure was 1.7 psig above the limit curve. This equates to approximately 3.9 feet of water. Calc 190-0034 Rev 5 only ensures a column of water in the RUT line 2.2' high. The observed error in the limit curve is therefore larger than the margin provided by the calculation.</p>			
(4) Is this problem a Radiological Safety Concern?			
<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES Immediately contact RF Supervisor for proper documentation.			
(5) Requirement(s) Violated: <u>Unknown</u>			
(6) Associated/Related Documents: <u>Calc 190-0034 Rev 5 ROP-8 Rev 2 OP-1038 Rev 12</u>			
(7) Immediate Actions Taken: <u>vented RUT to lower pressure to be within the acceptable region of the RUT pressure limit curve.</u>			
(8) Recommendations for Resolving the Problem: <u>Update Calc 190-0034 assumptions and data to be consistent with ROP-8 actions and observed RUT pressure response.</u>			
(9) Originator (print name): <u>Robert P. Weiss</u>		Date: <u>9/7/94</u>	
Originating Department Supervisor/Manager Review, O&I Review and PR CLASSIFICATION DETERMINATION:			
(10) PR is:			
<input type="checkbox"/> a KNOWN Design Basis Issue <input checked="" type="checkbox"/> SUSPECTED Design Basis Issue <input type="checkbox"/> Not a Design Basis Issue			
(11) Recommended Responsible Organization:	<u>Sik Nuclear Eng</u>	Accepted By: <u>A.G. WASHBURN</u>	Date: <u>9-7-94</u>
Responsible Manager:	<u>JW Campbell</u>	CAP Assignment (if applicable): <u>LANE / SALTMAN</u>	
(12) Originating Sign/Reg (print & sign):		(13) PR Issue Date:	
<u>D Field</u> <u>WFB</u>		<u>9/7/94</u>	
(14) <input checked="" type="checkbox"/> SOTA review required		(Deliver to SOTA and notify SQA)	
<input type="checkbox"/> SOTA review NOT required.		(Send to Director, Quality Program)	
(15) DIRECTOR, QUALITY PROGRAM:	<u>SK Robinson</u> <u>P. McKee</u>		Date: <u>9/8/94</u>
PROBLEM REPORT TRANSMITTED TO THE RESPONSIBLE ORGANIZATION <input type="checkbox"/> By: _____ Date/Time: _____			

Rev. 1/94

REF: L:Pe of Plant RESP: Quality Program 900 973

PROCEDURE REVIEW RECORD (page 1 of 3)

PRC# 94-467
PRC# 0 TAI Change Rev 0 0 Title: Make Up Tank Pressure Limit Curve Verification

DESCRIPTION OF NEW PROCEDURE OR CHANGE (Detailed)

TAI (attached) will increase MNT level to 86" and pressurized with N₂ to the limit of 0A102 B Curve B. MNT will then be bleed to a level of 55". MNT response, from REDAS, will be compared with predicted response as described by Curve B of 0A102 B.

REASON AND REFERENCES FOR PROCEDURE OR CHANGE

Curve B of 0A102 B is based upon Engineering Calculation I90-0024 Rev 5. During performance of SP-630, HPI Full Flow Test, during Refuel 9, data indicated Curve B may not be accurate during MNT draw down. This test data will be sent to SNES to be included with PR94-149 which documented concerns raised by SP-630.

- ☐ Result of scheduled procedure review notification from Document Control
 - PRN-A previously submitted to Document Control
 - Enclosure 23 of AI-402B attached
- ☐ Biennial Review conducted prior to normal review frequency
 - PRN-B (Enclosure 10) attached
 - Enclosure 23 of AI-402B attached (as required)
- ☐ Plant Modification: MAR Number _____
- ☐ Non-Conformance: Finding number and date _____
- ☐ Technical Specification Amendment: Specification Number _____

Originated By UFill Title NSS Date 9/19/94

Final Procedure Approvals

Interpretation Contact	<u>[Signature]</u>	Date	<u>10/10/94</u>
PRC Meeting No.	<u>94-46</u>		
Plant Review Chairman	<u>[Signature]</u>	Date	<u>10/13/94</u>
Dir. Nuc. Plant Oper.	<u>-</u>	Date	<u>-</u>

☒ Not Required

PROCEDURE REVIEW RECORD (page 2 of 3)		
PRR#	Proc # <u>12-42-44</u>	Current Rev # <u>0</u>
Title: <u>MET Case Unit</u>		
Screening for Applicability of 10CFR 50.59		
Does the procedure change or new procedure:	Yes	No
A. Affect the design, function, or method of performing the function of a structure, system, or component (SSC) described in the PSAR either by test, drawing, or other information relied upon by the NRC?	X	X
B. Appear significant enough as to require inclusion in the PSAR?		X
C. Alter processes directed by procedures as described in the PSAR (see NRC-1117)		X
D. Affect tests or experiments not described in the PSAR?		X
E. Involve temporary changes in plant configurations while the proposed work is in progress?		X
F. Is this a change to the Technical Specifications? If "Yes", contact the Manager, Nuclear Licensing.		X
<p>BECAUSE (Explain your answers and list PSAR and Technical Specifications reviewed)</p> <p>Maximum, MET overpressure is not specifically addressed in the PSAR, however, system reliability of the ECCS is addressed in Design Criteria 42, 43, 44, and 46. NRC Information Notice 88-23, Supplements 1, 2, and 3 did specifically address H₂ entrainment of HPI pumps.</p>		
<p>If the answer to any question A through F is yes THEN an Evaluation for an unreviewed Safety Question shall be performed (10 CFR 50.59 Evaluation) (Enclosure 2).</p>		
Screening for Plant Review Committee (PRC) evaluation		
a. Does this procedure/procedure change reduce a "Safety Margin" as defined in the basis for any Technical Specification?		X
b. Will this procedure/procedure change cause an unexpected plant response or transient?		X
<p>If the answer to question a or b is yes, THEN ensure the procedure receives a Plant Review Committee (PRC) evaluation prior to implementation.</p>		

PROCEDURE REVIEW RECORD (page 3 of 3)			
PRR#	Proc # ⁰²⁻⁰⁰¹⁻²⁶⁷ TS-1	Current Rev # 0	Title: M&T Pressure Limit Curve Unification
10 CFR 50.54 Review			
Does this modification or document change any of the following plans/programs?	Yes	No	N/A
o Quality Program Description (FSAR Section 1.7)		✓	
o Security Plan		✓	
o Radiological Emergency Response Plan		✓	
o Crystal River Unit 3 Fire Protection Plan		✓	
o Safeguards Contingency Plan		✓	
o Security Guard Training and Qualification Plan		✓	
o Licensed Operator Requalification Program (FSAR Section 12.2.3.4 and Appendix 12C)		✓	
If "YES," then:			
o The appropriate approvals and changes have been made and are attached.			✓
o If required, NRC approval is attached.			✓
Review for Change to Radioactive Waste System.			
o Will this change to a radioactive waste system (liquid, gaseous, or solid), result in an increase of radioactive material released to the environment?			✓
o If "YES", submit change to Manager, Site Nuclear Licensing to evaluate reporting requirements.			
Environmental Protection Plan Review			
o Could this affect the environment in a non-radiological way?			✓
o If "YES," contact the Manager, Nuclear Licensing to perform an evaluation and attach.			✓
Performed By <u>JFell</u> Date <u>9/19/94</u>			

10 CFR 50.59 EVALUATION		YES	NO
Evaluation for Unreviewed Safety Question (USQ) Review, as applicable, Nuclear Operations Directive (NOD) T1, Attachment B, "Evaluation for Unreviewed Safety Questions" before completing this evaluation. Support Yes or No answer in comments section. Do not simply restate the question.			
a. Is the probability of occurrence of an accident previously evaluated in the FSAR increased? Because: Performance of the test procedure will not alter the function of the Make Up and Purification System as described in the FSAR.			X
b. Are the consequences of an accident previously evaluated in the FSAR increased? Because: A designated operator will be stationed to vent H ₂ off the MUT should a large break LOCA occur during testing. Designated operator will be in constant communication with Control Room.			X
c. Is the possibility of an accident of a different type than any previously evaluated in the FSAR created? Because: The purpose of the test is to challenge the validity of the existing MUT Maximum Pressure Curve. The data obtained may reduce the possibility of H ₂ re-entrainment in HPI system, which was a test objective by T-10-03.			X
d. Is the probability of malfunction of equipment previously evaluated in the FSAR increased? Because: Make Up System will be operated in accordance with OP-402. MUT H ₂ pressure is significant during large break LOCA conditions. A designated operator will be standing by to vent MUT should LOCA occur.			X
e. Are the consequences of malfunction of equipment previously evaluated in the FSAR increased? Because: HPI pumps are essential to mitigate LOCA consequences. Sufficient contingencies are in place during performance of the test to assure equipment will function properly even if LOCA occurs while testing.			X
f. Is the possibility for malfunction of equipment of a different type than any previously evaluated in the FSAR created? Because: Make Up System components will be operated in accordance with existing procedure guidance.			X
g. Is the margin of safety, as defined in the basis for any Technical Specification, reduced? Because: Margin of Safety will not be reduced by this test based upon above evaluation which found ITS requirements.			X
If the answer is "Yes" to any of the questions (a) through (g), THEN an Unreviewed Safety Question (USQ) is involved. Contact the Manager, Nuclear Licensing, to discuss the USQ. If the answer is "No" to all questions (a) through (g), but FSAR changes are required (as identified by a yes answer to the "Screening for Applicability of 10CFR 50.59" THEN the changes to the FSAR and a copy of the "Screening for Applicability of 10CFR 50.59" the "Evaluation for Unreviewed Safety Question (USQ)" and comments must be provided to the Manager, Nuclear Licensing via internal office correspondence.			
JH 9/16/94 Originator/Date		Gregory Huber 10/10/94 Interpretation Contact/Date	

* Indicates that after a LOCA for operator action is required. The calculation assumes approx 1/2 hour after a LOCA, action needs to be taken.

NEW/REVISED PROCEDURE CHECKLIST	
PRR#	PROC # 7P-1 REV # 0 TITLE: MET PAPER Limit Core Verification
Originator of Revised/New Procedure	
o Correction techniques such as "white out", correction tape, paste over, or similar techniques have not been used.	✓
o Ensure Non-Quality documents are identified as "Optional Records Non-Quality"	NA
o PRR and the Safety Evaluation is complete and adequate (if required).	✓
o Environmental Qualified Status has been determined and designated on the procedure cover sheet.	NA
o For new SPs, dry run walk through complete.	NA
o Determine if procedure describes an infrequently performed test or evaluation.	✓
o Enclosure 23 of AI-400B complete and attached for SPs, infrequently performed tests or evaluations and all new procedures with the exception of EOPs/APs/VPs.	✓
o IF this procedure affects other procedures, THEN the Interpretation Contacts for these procedures have been notified.	N/A
o Internal references to data sheets, enclosures, other sections of the procedure, etc., have been verified.	NA
o The CMIS Database Update Request Form (Enclosure 4 of AI-400B or Enclosure 4 for AI-400C) has been completed.	NA
o PRP is attached and updated with correct procedure references.	✓
o Comments addressed by the PRP have been properly satisfied.	✓
o Affected references have been identified on the Procedure Cross-Reference Sheet.	NA
o Appropriate Qualified reviews and Inspection Planning reviews (when required) have been completed.	✓
o SNES (EQ Group) performed a Qualified Review of Procedure affecting Environmentally Qualified Equipment.	PA
o SNES performed a qualified review for procedures involving a design change.	NA
o The Notification of New/Revised Procedure form (Enclosure 8) is completed and attached.	✓
<div style="display: flex; justify-content: space-between;"> <div> <p>DAED 9/24/94</p> <p>Originator/Date</p> </div> <div> <p><i>[Signature]</i></p> <p>Interpretation Contact/Date</p> </div> </div>	
o Does this document implement any activity in Appendix A of Regulatory Guide 1.33 (NOD-12) or any other procedures required by Technical Specifications?	✓
o If "YES", ensure the review and approval cycle meet the requirements of Technical Specifications.	✓

ENCLOSURE 2

FLORIDA POWER CORPORATION
QUALITY ASSURANCE RECORD
TRANSMITTALATTENTION: RECORDS MANAGEMENT SECTION
CRYSTAL RIVER UNIT NO. 3DOCUMENTS TRANSMITTED: Procedure Review Record for procedurePR-94-267-TP-1, Makeup Tk. Pressure Limit
Curve Verification;Ref: PR94-267The Quality Assurance Records listed above are hereby transmitted for
inclusion in the Plant Quality File.These records are complete and in compliance with the requirement of Florida
Power Corporation's Quality Program.Ken Vora
Responsible Supervisor/DesigneeDATE 10/20/94

RECEIPT ACKNOWLEDGEMENT BY:

P. Winters
Manager, Nuclear Information Resources/DesigneeDATE 11/18/94

FUTURE RETENTION OF THESE RECORDS IS THE RESPONSIBILITY OF RECORDS MANAGEMENT.

INFREQUENTLY PERFORMED TEST OR EVOLUTION CHECKLIST

Answer the following questions to determine if this procedure describes an infrequently performed test or evolution.

IF unable to make a determination following completion of this checklist,
THEN consult the DNPO for final decision.

1. Does this procedure create a situation that can affect the core, reactivity control, or the reactor protection system?

☒ NO IF the answer is no,
THEN this checklist is complete and it is NOT to be included in the procedure package.

☐ YES IF the answer is yes,
THEN SOER 91-01, Conduct of Infrequently Performed Tests or Evolutions (available from the Operations Technical Advisors), should be reviewed to help assure adequate controls are in place for the optimization of reactor safety,
AND continue on with this checklist.

2. Does this procedure create an evolution not covered by an existing normal or abnormal operating procedure?

☐ YES ☒ NO

3. Does this procedure create an evolution that will seldom be performed, even though it is covered by an existing normal or abnormal operating procedure?

☐ YES ☒ NO

4. Does this procedure create an infrequently performed surveillance test that involves complicated sequencing, or placing the plant in an unusual configuration?

☐ YES ☒ NO

5. Does this procedure required the use of a special test procedure in conjunction with existing operating or testing procedures?

☒ YES ☐ NO

PROCEDURE REVIEW SIGN-OFF SHEET				
Procedure No: <u>PL 94-267 77-1</u> Procedure Title: <u>Molten Salt Pressure Limit</u> <i>Page Van Heston</i> Rev.: <u>0</u>				
QUALIFIED REVIEWERS	Reviewed By	Date	Comments Attached	Comments
<input checked="" type="checkbox"/> Nuclear Operations Department	<i>Ken Vogel</i>	<i>4/8/94</i>		<input checked="" type="checkbox"/>
<input type="checkbox"/> Nuclear Security Department	<i>Kou</i> <i>10/6/94</i>			
<input type="checkbox"/> Nuclear Quality Control				
<input type="checkbox"/> Nuclear Chem & Rad Prot Dept.				
<input type="checkbox"/> Nuclear Maintenance Dept.				
<input type="checkbox"/> Site Nuclear Engineering Services (EC Group)				
<input checked="" type="checkbox"/> Site Nuclear Engineering Services (Design Group)				
<input checked="" type="checkbox"/> Nuclear Plant Technical Support	<i>C.A. Lee</i>	<i>10/5/94</i>	<input checked="" type="checkbox"/>	<i>Local</i>
<input type="checkbox"/> Other				
<input type="checkbox"/> Other				
TECHNICAL REVIEW				
<input checked="" type="checkbox"/> Other Operations	<i>D. Jones</i>	<i>9/27/94</i>		<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Other Nuc Plant Technical Support	<i>P. Saltzman</i>	<i>10/5/94</i>		<input checked="" type="checkbox"/>

Return to:

D. Fields / A. Helman
Originator

D. Jones would not have expertise on changes contained in section 3.1.1, therefore there is no need for him to re-review.