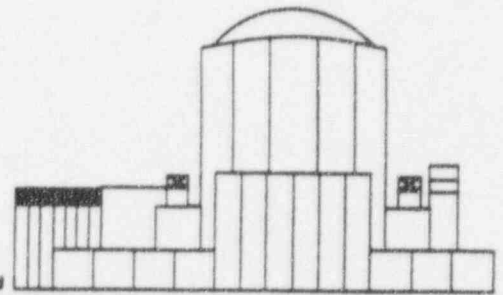
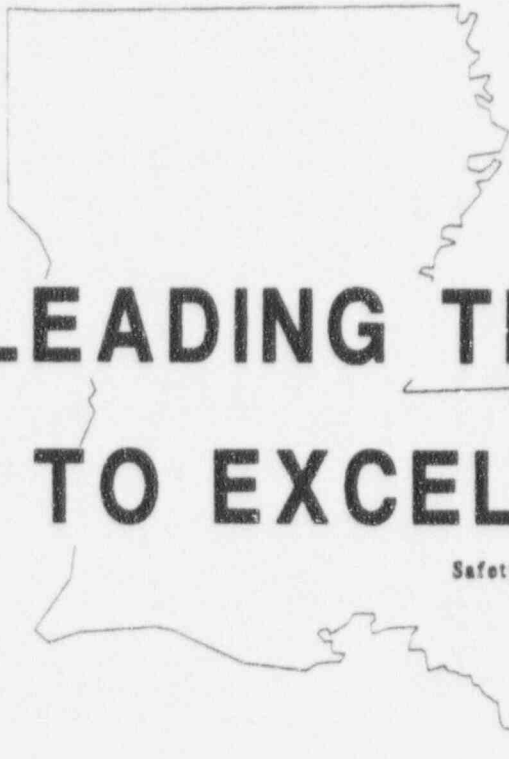




ENTERGY



WATERFORD SES - UNIT3



LEADING THE WAY TO EXCELLENCE

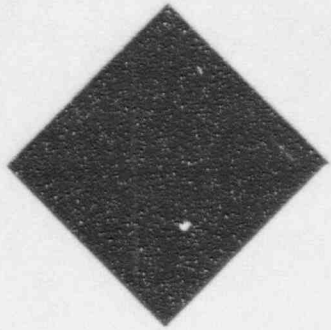


Safety — Efficiency
Generation

**Predecisional Enforcement
Conference**

November 20, 1996

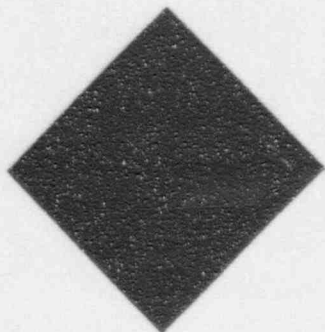
Entergy Operations, Inc.



WATERFORD 3

**PREDECISIONAL ENFORCEMENT
CONFERENCE**

NOVEMBER 20, 1996



AGENDA

Introduction/Agenda

Discussion of Violation 1(IST)

- Event
- Safety Significance
- Summary

Discussion of Violation 2 (CVR)

- Event
- Safety Significance
- Summary

Discussion of Violation 3 (CS-118A)

- Event
- Safety Significance
- Summary

Conclusion

MIKE SELLMAN

Vice President, Operations W3

Design Engineering

Matt Melancon

Matt Melancon

Al Wrape

Licensing

Tim Gaudet

Tim Gaudet

Jim Fisicaro

Operations

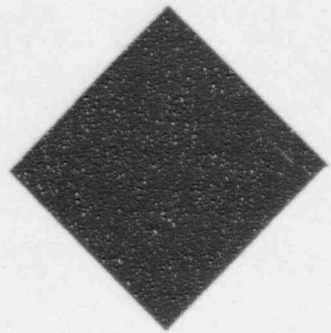
Dennis Matheny

Dennis Matheny

Chuck Dugger

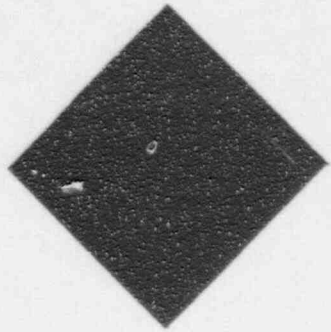
MIKE SELI MAN

Vice President, Operations W3



APPARENT VIOLATIONS

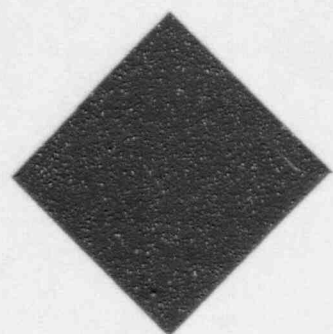
- An apparent Violation of 10 CFR Part 50 Appendix B, Criterion XVI, Corrective Action, in that the IST Plan was not updated in a timely manner to include the valves and valve safety functions that were not being tested.
- An apparent “defacto” violation of 50.59.a.1 & b.1. The actual as-built condition of the CVR lines conflicted with that in the response to FSAR Question 480.36 and the SER. No safety evaluation had been performed to ensure this system change did not involve an unreviewed safety question.
- An apparent Violation of TS 6.8.1, “Written procedures...,” in that contrary to procedure, CS-118A was not closed.



APPARENT VIOLATION 1

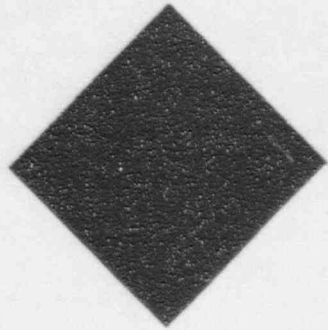
An apparent Violation of 10 CFR Part 50 Appendix B, Criterion XVI, Corrective Action, in that the IST Plan was not updated in a timely manner to include the valves and valve safety functions that were not being tested. This violation consists of 3 parts:

- failure to identify the need to leak test two valves since commercial operations
- failure to identify 13 valves that should have been in the IST plan
- failure to identify and test all the safety functions for 23 valves already in the IST program



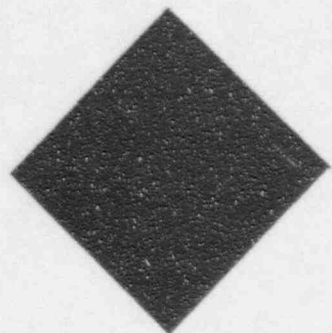
PROBLEM STATEMENT

Waterford 3 failed to properly resolve the identified IST Program discrepancies in a timely manner



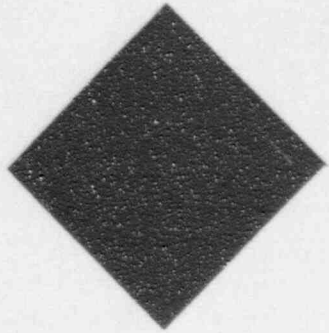
OVERVIEW

- IST program discrepancies were self identified
- We will illustrate the mindset of the people involved, the differences of opinions, and the different interpretations of code requirements
- When Design Engineering assumed responsibility for the IST Program, they took aggressive and comprehensive actions to review and revise the plan
- Waterford 3 was pursuing path to resolve IST Program issues prior to NRC involvement
- Subsequent testing of the valves supports that the respective systems were capable of performing their safety function
- Under new direction, W3 understands the broader issues



SEQUENCE OF EVENTS

- Timeline from March 1994 to present
- Need for improvement recognized
- IST Program issues aggressively being addressed



SEQUENCE OF EVENTS

Date

Event

March 1994

Inservice Testing Basis Document (DBD-024) issued with the knowledge that differences with IST Plan existed.

April 1994

Revision 8 of the IST Plan to include changes resulting from information learned during basis document preparation. Revision 8 approval expected in May 1994.

May 1994

IST Plan task force formed to determine if the IST Plan meets all ASME code requirements.

November 1994

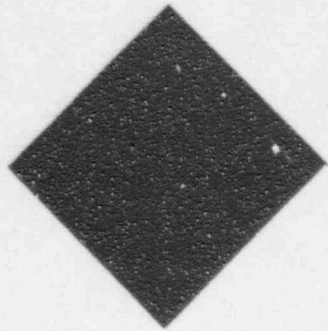
IST Plan task force issues final report to management identifying discrepancies for 39 valves

Report states,

"These were simply enhancements and certainly not requirements," and "...we are in compliance with the "law" even though some areas of improvement were found."

August 1995

Draft Revision 8 turned over to Design Engineering to review, evaluate and process for approval.



SEQUENCE OF EVENTS

Date

Event

September/October 1995

Waterford 3 conducts its 7th refueling outage. Design Engineering resources limited for IST Plan revision work.

October 1995

Design Engineering actively working to resolve DBD-024 open items in support of issuing Revision 8 of the IST Plan by the end of February 1996.

DE started by reviewing priority items which addressed some of the 39 discrepancies.

December 1995

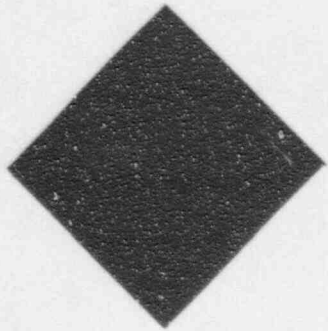
In response to CR-95-0729, Design Engineering states that the IST Plan will be revised by 3/31/96.

January 1996

ACCW issues raised. NRC inspector questions closed safety function of ACCW-108A(B).

CR-96-055 generated to address closed safety function of ACC-108 valves.

These actions accelerated the DE planned review schedule by approximately one month.



SEQUENCE OF EVENTS

Date

Event

February 1996

Operability assessments were performed for IST plan discrepancies.

Revision 8 to IST plan is approved.

March 1996

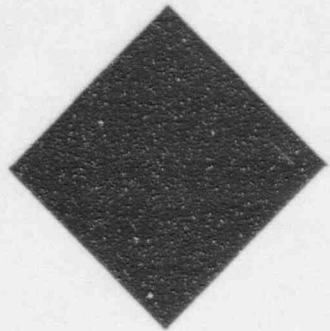
NRC questions operability assessment for 10 of the valves.
CR-96-272 generated and W4.101, "Operability/Qualification Confirmation Process," entered to further addresses operability and testing of 12 valves.
IST testing of 36 valves begin.
Root Cause Analysis for CR-96-055 approved.
IST action plan issued.

April 1996

Comprehensive review of ASME Class 1, 2, and 3 pumps and valves begins.

July 1996

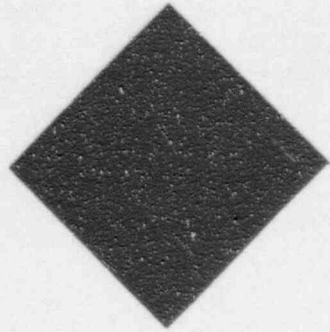
Completed testing of all valves.



SEQUENCE OF EVENTS

SUMMARY POINTS

- Discrepancies were known in March, 1994
- In November of 1994, Task force viewed plan changes as enhancements and not requirements
- Design Engineering aggressively pursued resolution since October, 1995
- By December, 1995 the schedule for resolving discrepancies and processing Revision 8 was established as 3/31/96
- Resolution of the identified IST discrepancies accelerated one month due to NRC
- Actual valve testing completed sooner as result of NRC involvement



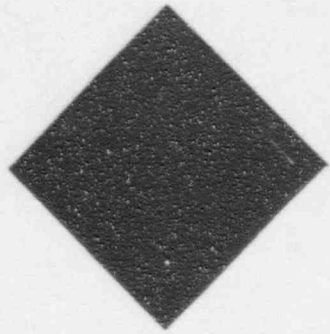
ROOT CAUSES

■ Management Methods:

- Ownership inappropriately assigned to STAs
- Management perceived as not receptive to additional testing
- Inadequate & ineffective action tracking

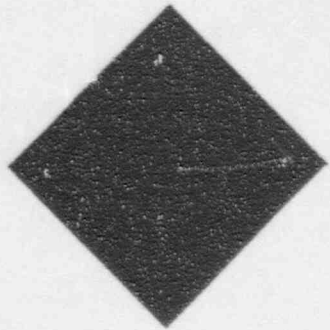
■ Administrative Controls:

- IST Bases document and IST Plan changes need to be coordinated
- No guidance concerning how long DBD open items may remain open
- Subsequent items identified in an earlier review were not entered in the Corrective Action Program



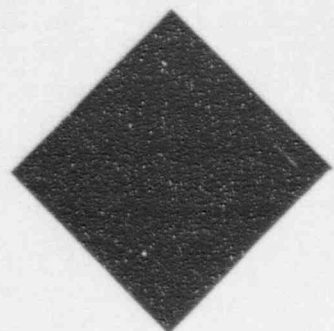
CORRECTIVE ACTIONS

- Ownership of IST Plan changed to Programs Engineering effective August '95
- IST Plan/DBD discrepancies resolved and incorporated into IST Plan
- IST Plan/DBD discrepancies assessed for operability concerns; none found
- DBD-024 open items have been resolved
- Testing of valves is complete
- Coordination of changes to IST plan and Bases Document are now procedurally controlled
- IST process has been flow charted to look for improvements
- Comprehensive review of ASME Valves and current IST Plan/basis to facilitate development of the Second Interval Plan to be completed by 12/31/96



ACTION PLAN

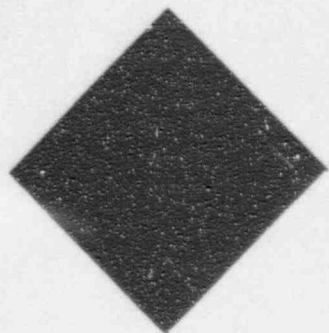
- Implementation of Revision 8, Change 0
- Overall Process Review
- IST Program Documents Review
- IST Program Scope Review



SAFETY SIGNIFICANCE

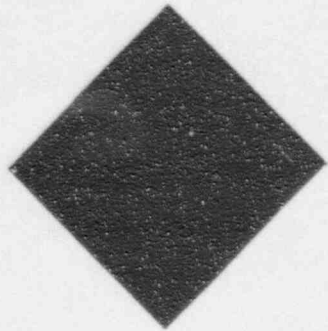
Waterford 3 has concluded that there was no safety significance associated with identified plan discrepancies.

- 34 of the 36 valves passed their respective leak and/or stroke tests and were found to be operable and capable of performing their safety function
- 2 of the 36 valves failed their stroke tests (CVR 302A(B)) yet the system was capable of performing its intended safety function



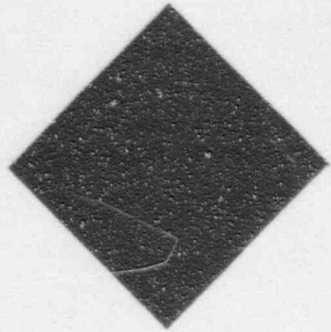
SUMMARY

- Waterford 3 acknowledges IST Program discrepancies existed for an extended period
- Waterford 3 was pursuing path to resolve IST Program issues prior to NRC involvement
- Under new direction prompt, broad and comprehensive corrective actions were taken
- Subsequent testing supported that safety functions were maintained



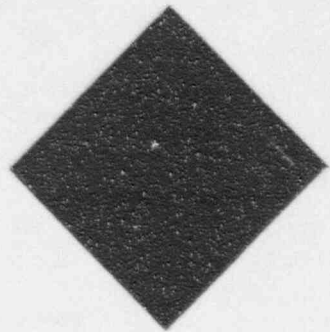
SUMMARY

- Waterford 3 is addressing broader issues in FOCUS Plan
- No actual safety significance existed
- Not a programmatic issue
- Meets the criteria for a Severity Level IV Violation
 - Severity Level IV -- A failure to meet regulatory requirements that have more than minor safety or Environmental significance



APPARENT VIOLATION 2

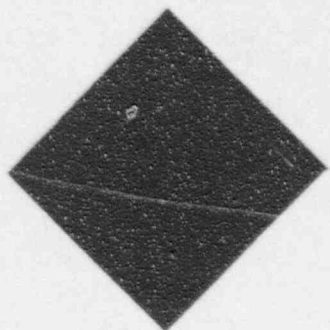
An apparent “defacto” violation of 50.59 in that the actual design configuration of the CVR system was different from that described in FSAR Question 480.36. No safety evaluation had been performed to ensure this deviation from the response to FSAR Question 480.36 did not involve an unreviewed safety question.



Problem Statement

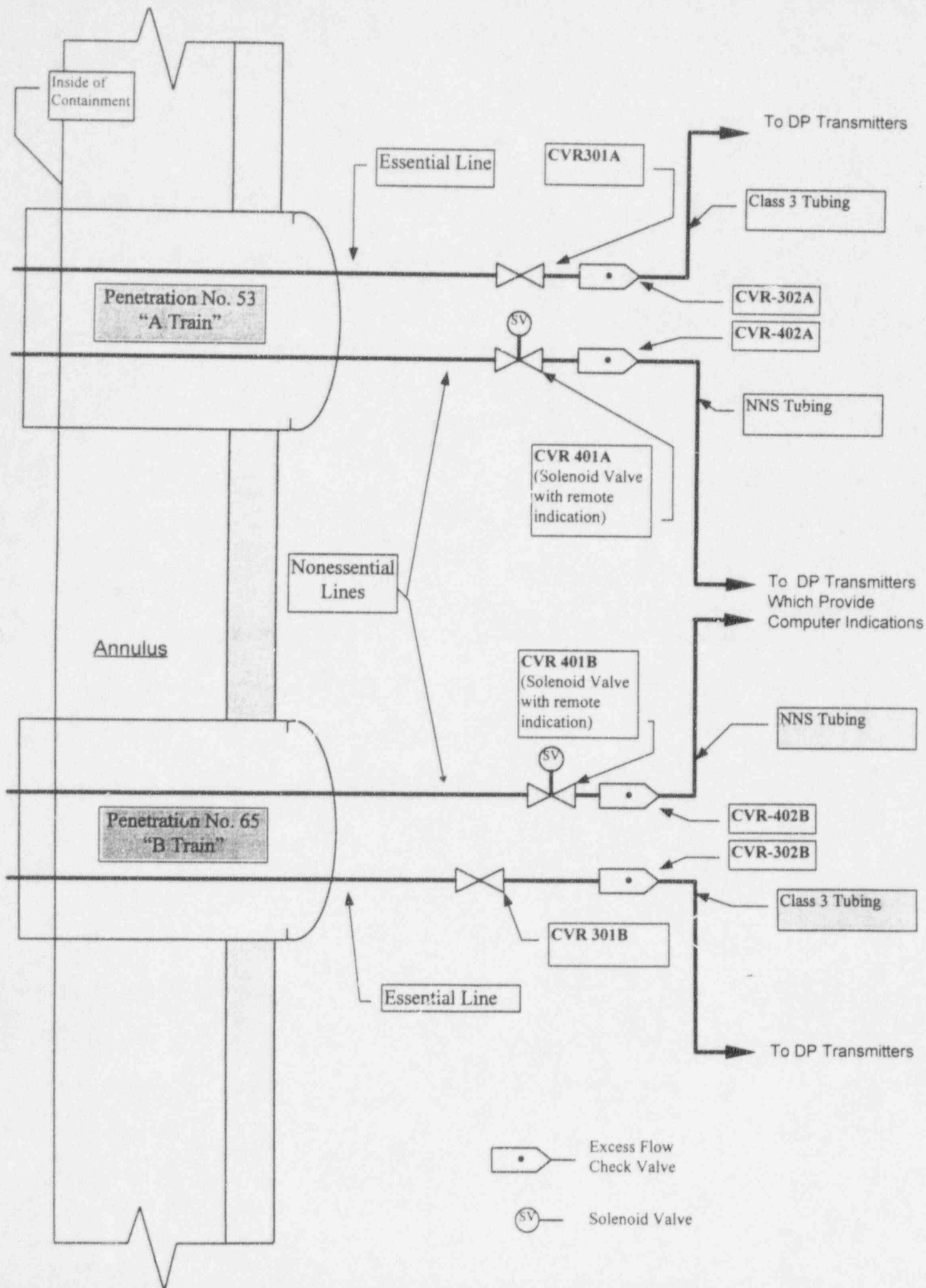
In 1981, the response to FSAR question 480.36 part b provided incorrect information about the design and installation of the CVR instrument lines from Containment Penetrations 53 and 65. Until the recent evaluation, W3 was not aware that the as-built condition of the system conflicted with that in the FSAR and SER.

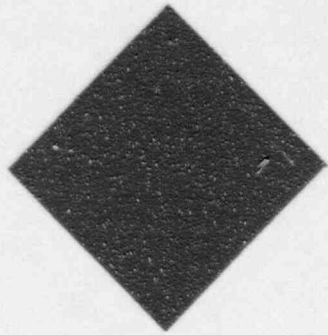
As a result of the information in the FSAR question response, the appropriate testing of the valves in the instrument lines was not performed.



Overview

- Problem was self identified following testing of CVR-302A(B) in the essential instrument line
- W3 did not just concentrate on resolving the identified CVR-302A(B) problem, but continued to review similar instrument lines and determined the CVR non-essential lines were not built or installed as assumed
- W3 quickly evaluated the scope of problem and potential safety consequences
- Prompt, comprehensive corrective action
- Submittal of license amendment





Sequence of Events

Date

Event

2/29/96

Verification of the closed safety function with cold shutdown justification was added to the IST Plan for valve CVR-302A(B).

6/3/96

IST inspection IR 96-09 begins and goes through 7/10/96

7/19/96

Plant entered Mode 5 to repair reactor coolant pump seal. (This was the first opportunity W3 had to test these valves)

7/20/96

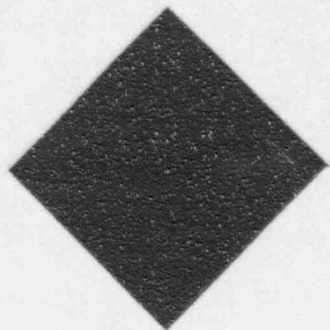
CR-96-1103 written to address failure of CVR-302A(B) to stroke when tested in accordance with STP 01146264. This was the initial closure tests for the IST Plan.

7/21/96

Following testing of CVR-302A(B) valves, STAs identified the CVR instrument cabinets as being outside the CVAS boundary and questioned this as a possible bypass leakage path.

7/22/96

Validation of the information in FSAR Question 480.36 was begun



Sequence of Events

Date

Event

7/23/96

As a result of the above review, CR-96-1123 was written to document that the response provided to FSAR Question 480.36 was incorrect. This information appears to have been used to develop our current licensing bases which does not require Type C testing of the valves in the instrument lines.

7/24/96

Valves CVR-302A(B) replaced and successfully retested.

7/25/96

CR-96-1143 written to document valves CVR-402A(B) as having an active closed safety function. The valves were not currently in the IST Plan.

7/26/96

CR-96-1152 was written to document that the Class 2 and 3 tubing in containment penetrations 53 and 65 was not being tested in accordance with the ASME Section XI Pressure Test Program.

7/26/96

CR-96-1177 was written to document the failure of CVR-402A(B) to stroke when tested in accordance with in STP 01149602.

7/28/96

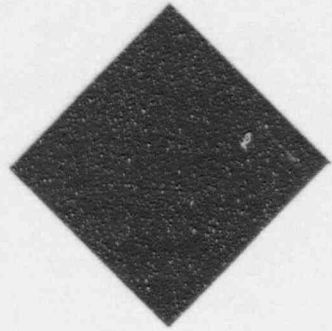
Valves CVR-402A(B) were replaced and successfully retested in accordance with WAs 01149604 and 01149603 respectively.

8/21/96

Submitted License Amendment Request NPF-38-181; Discrepancy Regarding the Design and Testing of Instrument Nonessential Lines Penetrating the Primary Containment

8/27/96

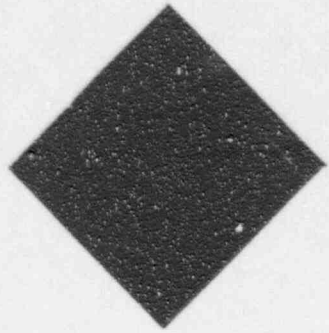
NRC began an inspection of the CVR issue (IR 96-20).



Sequence of Events

SUMMARY POINTS

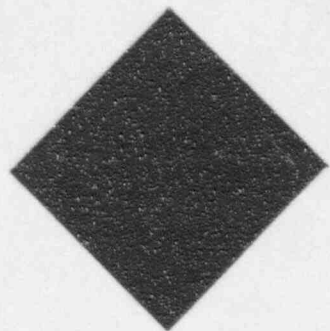
- CVR-302A(B) valves failed their initial stroke test
- As a result of valve testing, Licensee identifies a potential bypass leakage path
- Response to FSAR question 480.36 was determined to be incorrect
- All failed valves are replaced and satisfactorily retested
- Licensing Amendment issued



ROOT CAUSES

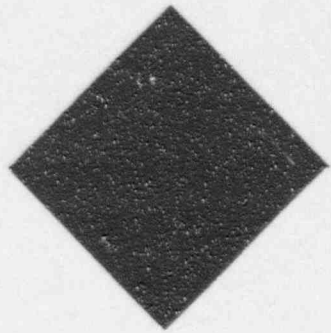
In 1981, the Architect/Engineer and Licensee personnel that prepared the response to FSAR Question 480.36 performed an inadequate review of existing design criteria/documents when obtaining CVR system information. The validation of the information in the response prior to submittal was also inadequate.

The development of the testing requirements for the CVR instrument lines was based on the incorrect information in the response to FSAR Question 480.36.



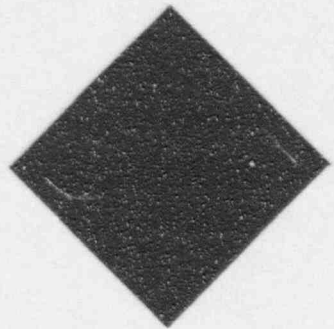
CORRECTIVE ACTIONS

- Promptly replaced failed CVR-302A(B) valves and retested the replacement valves
- The essential instrument lines were leak tested
- Promptly type C tested CVR-401A(B)
- Promptly replaced failed CVR-402A(B) valves and retested the replacement valves
- A Root Cause Analysis was performed to evaluate the condition
- The non-essential lines were isolated and are administratively controlled until a plant modification and license amendment could be implemented
- Promptly submitted license amendment
- The potential safety consequences were evaluated in LER 96-009-00
- No other instrument lines that penetrate containment were found with similar problems
- This issue initiated a broader review of other penetrations having closed systems



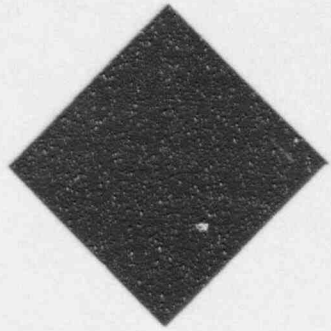
BROADER ISSUES

- An RCA was performed to address FSAR inconsistencies
- RCA and revision of 50.59
- EOI team conducted SAR fidelity assessment at W3
- Design bases reviews and System Self Assessments will be outlined in the 50.54F response



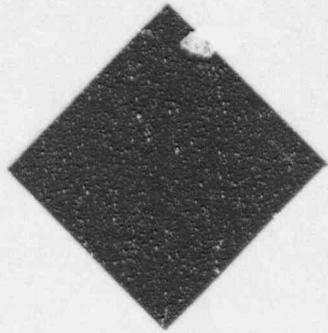
SAFETY SIGNIFICANCE

- No actual safety consequences as a result of this event
- Potential safety consequences were extremely unlikely (2.03×10^{-8})
 - Seismic event coincident with a LOCA
 - Failure of either solenoid valve CVR-401A(B)
 - Failure of instrument tubing rated at 4500 psig and 300 degrees
 - Very low probability of a rupture due to either internal or external events



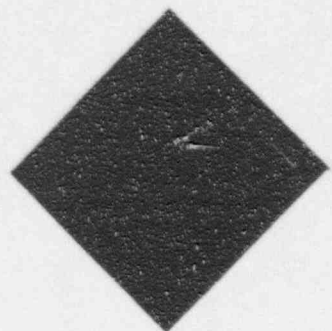
SUMMARY

- Waterford 3 identified
- No actual safety consequence
- Extremely low potential safety consequences
- Waterford 3 took prompt and comprehensive corrective actions
- Event is an “old design” issue
- Clear basis for discretion
- If Level III is necessary, no civil penalty is warranted



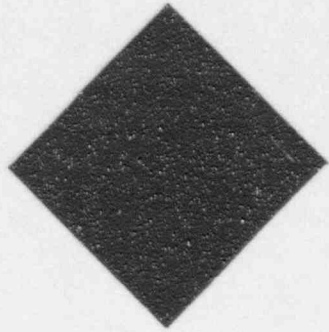
APPARENT VIOLATION 3

**An apparent Violation of TS 6.8.1,
"Written procedures...", in that
contrary to procedure, CS-118A
was not closed.**



Problem Statement

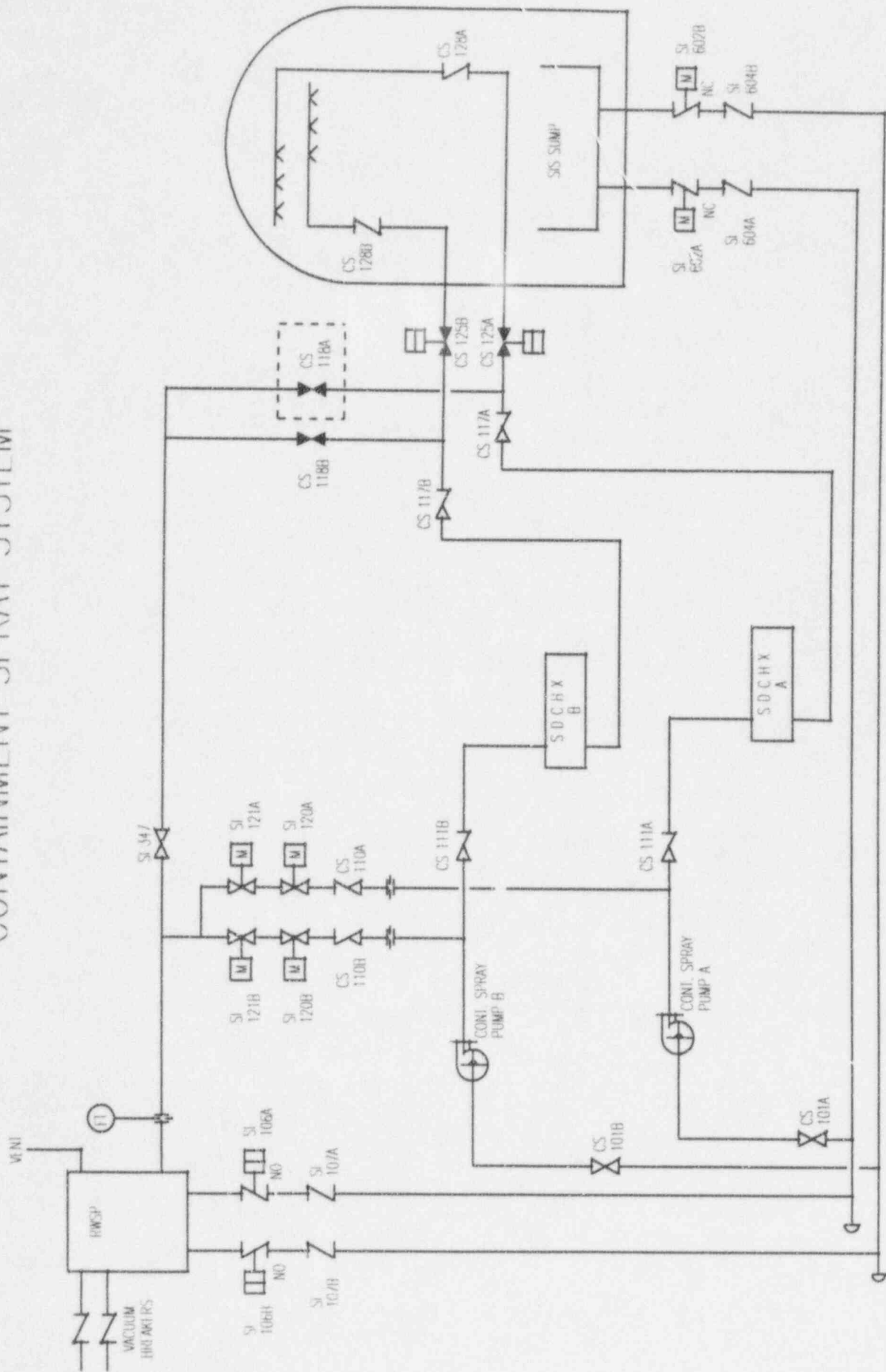
Valve CS-118A was found to be 1 & 1/2 turns open following a surveillance test. Excessive post accident leakage past this valve to the RWSP could affect control room dose limits.

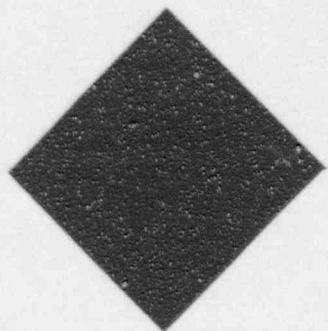


Overview

- Self disclosing event revealed valve was found 1 and 1/2 turns open due to equipment failure
- The initial Containment Spray system operability question was promptly addressed
- The concern over valve backleakage to the RWSP was self identified during discussions concerning IST valve testing as a result of a good questioning attitude
- No actual safety significance; extremely low potential significance

CONTAINMENT SPRAY SYSTEM





Sequence of Events

Date

Event

9/22/95

Began Seventh Refueling Outage

9/28/95

Replaced packing on CS-118A in accordance with WA 01132335

10/28/95

Valve CS-118A was verified closed in accordance with OP-009-001, Containment Spray System Operation Procedure

10/31/96

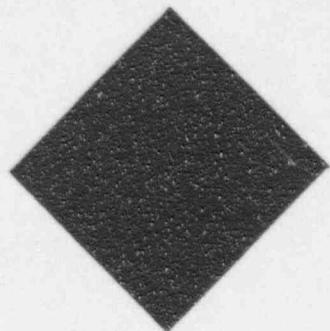
Plant enters Mode 4

11/5/95

Completed Seventh Refueling Outage

11/11/95

OP-903-094, ESFAS Subgroup Relay Testing was again performed on Train A. When CS-125A was stroked, Containment Riser A level dropped from 190' MSL to 135' MSL. A valve operating tool was used on CS-118A, to close it. CR-95-1165 was initiated.



Sequence of Events

Date

Event

12/13/95

Design Engineering evaluation confirms that if CS-118A was partially open 1 1/2 turns, it would not affect the operability of the Containment Spray System.

3/2/96

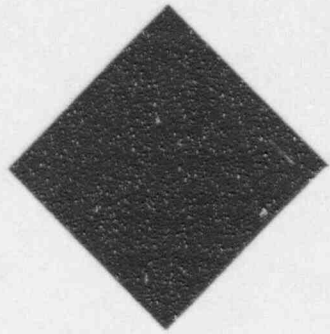
During discussions concerning IST issues, a good "questioning attitude" by the staff resulted in the discovery that CR 95-1165 did not address backleakage through CS-118A to the RWSP. Licensing initiated CR 96-0287.

3/25/96

Response from Design Engineering stated that a calculation to determine backleakage to RWSP through CS-118A at 1 1/2 turns open could not be calculated based on the available information and reportability remained indeterminate.

8/20/96

Licensing, Design Engineering and Safety Analysis determined that leakage through CS-118A could not be evaluated to be below the 8 gpm limit with confidence. Control Room 30 day projected doses COULD have been exceeded during a design basis accident with CS-118A 1 1/2 turns open.



Sequence of Events

Date

Event

9/4/96

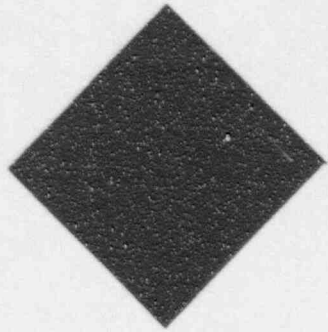
CI 304711 initiated concerning valve binding of CS-118A.

9/7/96

Special Test Procedure 01150615 was performed to empirically determine leakage through CS-118A at various throttled positions with Containment Spray Pump A running.

9/20/96

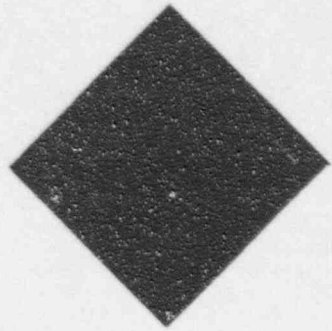
Submitted LER 96-012-00. This LER conservatively reported that control room operator thyroid dose limits could have been exceeded. However using realistic values for the dose rate analysis, Control Room dose limits would not have been exceeded.



Sequence of Events

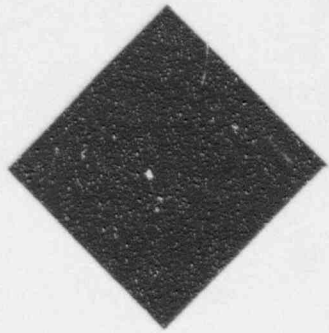
SUMMARY POINTS

- When the valve was initially identified as being open, CR 95-1165 only addressed the effect on system operability
- In February of 1996, valves CS-118A(B) were identified as requiring a leak test and added to the IST plan
- As a result of discussions concerning IST testing and a good questioning attitude, it was determined that back leakage through CS-118A should have been considered in CR 95-1165. CR-96-0287 was issued to address this concern
- Efforts to calculate leakage through CS-118A at 1 1/2 turns open could not be calculated based on available data
- A special test was performed to measure leakage through CS-118A at various throttled positions
- As a measure of conservatism, the highest leakage obtained during the special test was assigned the valve leakage; there is no credible data to indicate that leakage was the maximum value and not the minimum value obtained during testing
- Off site dose limits not exceeded even using conservative leakage values



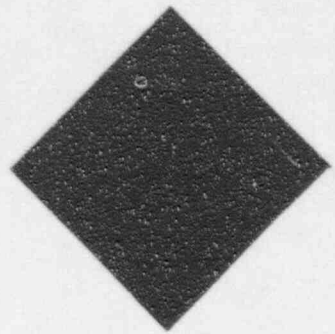
ROOT CAUSES

Equipment Failure: CS-118A operated smoothly and easily through most of its travel. Near the end, it binds to the point of appearing to be fully closed.



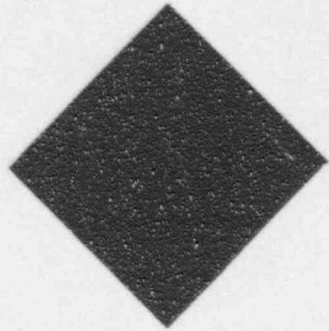
CORRECTIVE ACTIONS

- CS-118A was immediately closed
- CS-118A will be repaired/refurbished to ensure ease of operation during the next refueling outage
- Caution tag hung on CS-118A
- Inspected CS-118B valve and no problems were found
- Operators were interviewed to determine what valves were hard to operate
- Caution tags were hung on hard to operate valves and will remain until they are fixed
- Management expectations regarding difficult to operate valves were reinforced
- Design Engineering, Licensing, Safety Analysis and IHEA supervisors reviewed the RCA with appropriate personnel



SAFETY SIGNIFICANCE

- No safety limits were exceeded as a result of this event
- Using realistic control room shift schedules no control room dose limits would be exceeded
- Based on CS-118A being partially open for 17 days and the W3 PRA frequency for a LOCA, the probability of an accident occurring during a 17-day period out of the year is 2.30×10^{-7} .



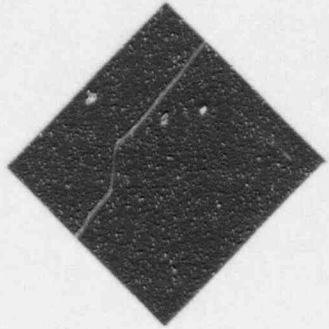
Control Room Dose Evaluations

ANALYSIS OF RECORD ASSUMES

- 8 gpm backleakage for 30 days
- Dose for 30 days
- RWSP vent pipe breaks at worst location
- 30 cfm flow between closed areas

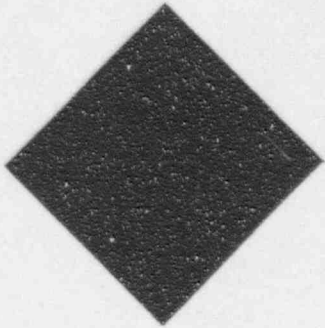
SAFETY SIGNIFICANT ANALYSIS ASSUMES

- No additional dose from RWSP after 24 hours
- 12.5 gpm backleakage
- 10 cfm unfiltered leakage from HVC-101 & 102



SUMMARY

- Waterford 3 identified
- No safety significance
- Corrective actions implemented
- The event fits the criteria for a Level IV violation for an event of more than minor safety significance



FOCUS on Timeless Principles

Foster professionalism

- Treat others with dignity and respect
- Take ownership and accept responsibility
- Practice personal accountability
- Set high standards and expectations

Operate safely and conservatively

- Put nuclear and personnel safety first
- Respond to Operations' priorities
- Avoid work-around situations
- Make risk-informed decisions

Communicate effectively

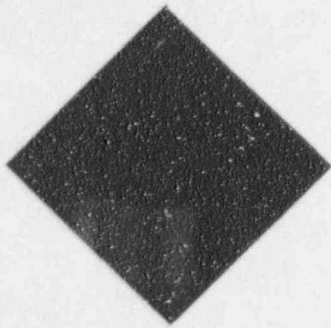
- Communicate timely, relevant information at all levels
- Give feedback and constructive criticism
- Listen to understand
- Be open and honest

Unify efforts

- Practice teamwork
- Empower and train people
- Maximize multi-skilled workforce
- Implement process improvements

Self-critical attitudes

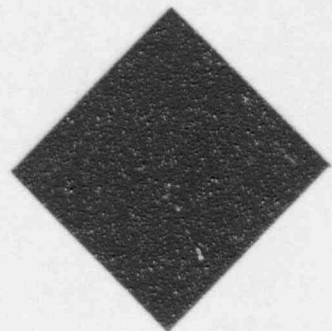
- Exhibit a questioning attitude
- Aggressively identify, evaluate, and fix problems
- Strive for continuous improvement
- Do the right things right the first time
- Don't shoot the messengers - reward them



CONCLUSIONS

Mike Sellman

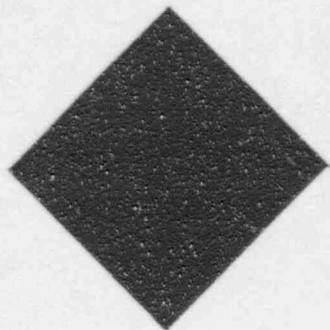
Vice President, Operations W3



CONCLUSIONS

APPARENT VIOLATION 1

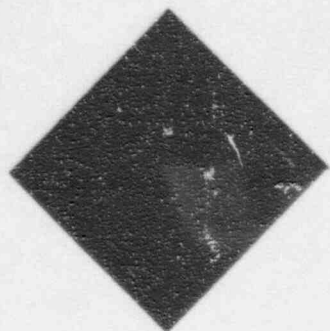
- Waterford 3 acknowledges IST Program discrepancies existed for an extended period
- Waterford 3 was pursuing path to resolve IST Program issues prior to NRC involvement
- Under new direction broad and comprehensive corrective actions were taken
- Subsequent testing supported that valve safety functions were maintained
- No actual safety significance existed
- Not a programmatic issue
- Waterford 3 is addressing broader issues in FOCUS Plan
- Meets criteria for Level IV violation
- Mitigating factors warrant consideration if enforcement action is determined to be necessary



CONCLUSIONS

APPARENT VIOLATION 2

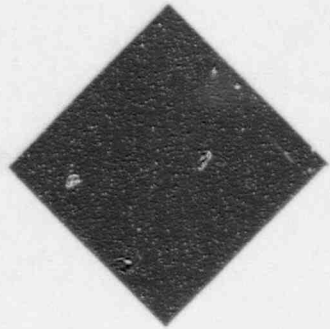
- Waterford 3 identified
- No actual safety consequence
- Limited potential safety consequences
- Waterford 3 took prompt and comprehensive corrective actions
- Event is an “old design” issue
- Mitigating factors warrant consideration if enforcement action is determined to be necessary



CONCLUSIONS

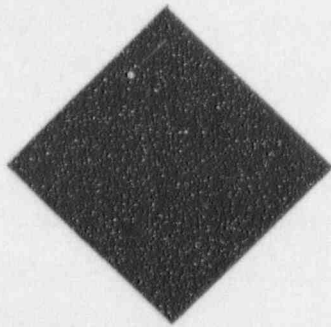
APPARENT VIOLATION 3

- Waterford 3 identified
- No safety significance
- Corrective actions implemented
- The event fits the criteria for a Level IV violation
- Meeting management expectations addressed in FOCUS Plan



WATERFORD 3 TODAY

- W3 HAS MADE SIGNIFICANT PROGRESS SINCE ACCW
- W3 HAS DEVELOPED A SELF CRITICAL AND QUESTIONING ATTITUDE
- W3 IS AGGRESSIVELY RESOLVING AND BOUNDING ISSUES



ATTACHMENTS

ATTACHMENT 1

ENFORCEMENT PERSPECTIVE

Severity Level

Safety Significance

- 34 valves passed their respective leak and/or stroke tests
- Tests demonstrate the valves are operable
- 2 valves, CVR-302A(B), failed their stroke tests but were able to perform their safety functions
- The 36 valves were capable of performing their safety functions
- No actual loss of safety function

Regulatory Significance

- Aggregation not applicable
- Not a willful violation
- Not a repetitive violation
- Waterford 3 Identified
- Waterford 3 failed to properly resolve the identified discrepancies in a timely manner
- Waterford 3 understands and has focused attention on the underlying cause

Conclusion

- No actual loss of safety function
- Not a programmatic issue
- Waterford 3 understands and has focused attention on the underlying cause
- Program under new direction, corrective actions were prompt, broad and comprehensive
- Meets criteria for Level IV violation - A failure to meet regulatory requirements that have more than minor safety or environmental significance (NUREG 1600, Supplement 1 - Reactor Operations)

Exercise of Discretion

If the NRC concludes that the apparent violations satisfy escalated enforcement criteria, Waterford 3 requests the exercise of enforcement discretion.

Basis for Discretion

Enforcement Policy provides the NRC the flexibility to exercise discretion to mitigate enforcement sanctions to reflect the level of NRC concern regarding the violations at issue and convey the appropriate message to the licensee

ATTACHMENT 1

ENFORCEMENT PERSPECTIVE

Basis for Discretion

- Credit should be given for actions related to identification
 - Programmatic reviews resolved the issue
 - Identification efforts were not prompted by NRC
 - NRC questions accelerated previously planned reviews
- Corrective actions, broad and comprehensive
- Self-critical evaluation - root cause analysis
- Waterford 3 has focused attention on the broader issues - FOCUS Plan
- Was not a willful violation
- Reason for violation was being addressed when identified

Based on the above, Escalated Enforcement is not necessary.

Civil Penalty Factors

Should the NRC consider imposition of a civil penalty, the following factors appear to apply:

- Licensee credit for actions related to identification
- Thorough understanding of the issues
- Broad and comprehensive corrective actions

Based on the above, no civil penalty is warranted

ATTACHMENT 2

ENFORCEMENT PERSPECTIVE

Severity Level

Safety Significance

- No actual safety consequence
- Potential safety consequences were extremely low

Regulatory Significance

- Aggregation not applicable
- Not a willful violation
- Not a repetitive violation
- Waterford 3 identified
- Waterford 3 took prompt & comprehensive corrective action

Exercise of Discretion

If the NRC concludes that the apparent violations satisfy escalated enforcement criteria, Waterford 3 requests the exercise of enforcement discretion.

Basis for Discretion

- Credit should be given for actions related to identification
- Corrective actions were prompt, broad and comprehensive
- Self-critical evaluation - root cause analysis was performed
- Was not a willful violation
- Event is an "old design" issue
 - licensee identified
 - immediate corrective action implemented, long term corrective action proposed
 - not likely to be identified by routine licensee events
- Conduct no reasonably linked to present culture

Based on the above, Escalated Enforcement is not necessary

ATTACHMENT 2

ENFORCEMENT PERSPECTIVE

Civil Penalty Factors

Should the NRC consider imposition of a civil penalty, the following factors appear to apply:

- Licensee credit for actions related to identification
- Thorough understanding of the issues and attention focused
- Prompt, broad and comprehensive corrective actions

Based on the above, no civil penalty is warranted

ATTACHMENT 3

ENFORCEMENT PERSPECTIVE

Severity Level

Safety Significance

- No actual safety consequences
- Using realistic shift schedules, control room dose limits will not be exceeded

Regulatory Significance

- Aggregation not applicable
- Not a willful violation
- Not a repetitive violation
- Waterford 3 identified
- Waterford 3 understands and has focused attention on the root causes

Severity of Violation

NUREG 1600, Supplement I -- Reactor Operations

Severity Level IV: A failure to meet regulatory requirements that have more than minor safety or environmental significance

Exercise of Discretion

If the NRC concludes that the apparent violations satisfy escalated enforcement criteria, Waterford 3 requests the exercise of enforcement discretion.

Basis for Discretion

- Credit should be given for self identification
- Self Critical Evaluation - root cause analysis
- Was not a willful violation
- Meets the criteria for a Level IV violation

Civil Penalty Factor

MEETS THE CRITERIA FOR A LEVEL IV VIOLATION.

ATTACHMENT 4

Inservice Test Program Action Plan

Priority	Issue	Goal	Responsibility	Status
A	IMPLEMENTATION OF REVISION 8 CHANGE 0			
1	Complete initial testing activities except for tests on cold shutdown frequency	Complete	L.R. LeBlanc	
2	Complete testing for components on cold shutdown frequency	Complete	D.C. Matheny	
3	Develop procedures/procedure changes necessary to perform all required testing activities not on C.S. frequency	Complete	D.C. Matheny	
B	OVERALL PROCESS REVIEW			
1	Investigate and flow chart the complete process from identification of components to be included in the IST Plan through implementation of testing including appropriate procedure changes	Complete	P.M. Melancon	
2	Perform Quality Assurance audit of program	Complete	C.R. Karling	
3	Implement identified improvements in procedures and processes as required	Complete	P.M. Melancon	
C	IST PROGRAM DOCUMENTS			
1	Process Revision 8, Change 1 to the IST Plan to correct editorial errors	Complete	P.M. Melancon	
2	Revise UNT-006-021 to reflect proper IST Plan responsibilities	Complete	L.R. LeBlanc	
3	Convert Guide PROG-I-258 to NOECP-258. Add action steps for CR initiation threshold and operability determinations. Incorporate results of IST Program process review.	Complete	P.M. Melancon	
4	Convert IST Bases Document from DBD-024 into a document controlled by Programs Engineering	Complete	P.M. Melancon	
5	Delete DBD-024, Inservice Testing Basis Document	Complete	P.A. Gropp	
D	IST PROGRAM SCOPE REVIEW			
1	Review functions of all ASME Class 1, 2, and 3 pumps & valves and implementation of test requirements	12/31/96	P.M. Melancon	95% complete
2	Documentation of Testing Bases for all ASME Class 1, 2 and 3 Pumps & Valves	12/31/96	P.M. Melancon	80% complete
3	Review approved IST Relief Requests	Complete	P.M. Melancon	
4	Review approved IST Cold Shutdown Justifications	Complete	P.M. Melancon	
5	Review IST-related licensing commitments	Complete	P.M. Melancon, D.M. Urciuoli	
6	INPO assist visit for IST	Complete	P.M. Melancon	

ATTACHMENT 4

Inservice Test Program Action Plan

Priority	Issue	Goal	Responsibility	Status
7	Complete second ten year interval update	12/1/97	P.M. Melancon	
E	CURRENT ISSUES			
1	Resolve NRC question concerning including valves in the IST Plan if they are identified for use in EOPs	Complete	P.M. Melancon	Item closed by in Inspection Report 96-09 (Item M8.3)
2	Determine root cause of inconsistent stroke times for hydramotor-actuated valves in the chilled water system. If required, submit a Relief Request to the NRC.	Complete	P.M. Melancon, A.M. Cilluffa	
3	Support the NRC IST inspection	Complete	D.M. Urciuoli, P.M. Melancon	Inspection Report 96-09 issued on 7/24/96.
4	Resolve issues related to failed surveillances (IST). Specifically, assess the practice of automatic entry into the system LCO when a component within that system fails an ASME Section XI surveillance. Develop an action plan to implement desired changes (i.e. identify any required procedure changes, training, etc.).	Complete	D.M. Urciuoli, P.M. Melancon, D.C. Matheny	
5	Resolve questions about instrumentation accuracy required for ASME Section XI testing activities (INPO item)	Complete	P.M. Melancon	Discussed at the IST Task Group meeting of 5/31/96.

ATTACHMENT 5

TESTING STATUS OF COMPONENTS WITH DISCREPANCIES BETWEEN REVISION 0 OF DBD-24 AND REVISION 7, CHANGE 10 OF THE IST PLAN

UNID	Valve Name	Additional Test Req.	Test Results
ACC-108A	ACCW Pump "A" Discharge Check	Active Closed	Tested on 3/1/96. Results were satisfactory.
ACC-108B	ACCW Pump "B" Discharge Check	Active Closed	Tested on 2/29/96. Results were satisfactory.
ACC-112A	ACCW Pump "A" Discharge to Chillers	Active Closed	Tested on 3/16/96. Results were satisfactory.
ACC-112B	ACCW Pump "B" Discharge to Chillers	Active Closed	Tested on 3/28/96. Results were satisfactory.
ACC-126A	ACCW Train "A" Temperature Controller	Active Closed	Tested on 3/16/96. Results were satisfactory.
ACC-126B	ACCW Train "B" Temperature Controller	Active Closed	Tested on 3/28/96. Results were satisfactory.
ACC-139A	Chiller Discharge to Wet Tower "A" Isolation	Active Closed	Tested on 3/16/96. Results were satisfactory.
ACC-139B	Chiller Discharge to Wet Tower "B" Isolation	Active Closed	Tested on 3/28/96. Results were satisfactory.
BAM-115	Gravity Feed Discharge from Boric Acid Makeup Tanks to Charging Pumps Suction	Active Closed	Tested during RF7 on 10/22/95. Results satisfactory. (Note this valve was already in test procedures before Revision 8 to the IST Plan was issued.)
CVC-217A	Auxiliary Pressurizer Spray Check	Active Closed	Tested during RF7 on 10/26/95. Results satisfactory. (Note this valve was already in test procedures before Revision 8 to the IST Plan was issued.)
CVC-217B	Auxiliary Pressurizer Spray Check	Active Closed	Tested during RF7 on 10/26/95. Results satisfactory. (Note this valve was already in test procedures before Revision 8 to the IST Plan was issued.)
CC-301A	Chiller Inlet Isolation	Active Open	Tested on 3/16/96. Results were satisfactory.
CC-301B	Chiller Inlet Isolation	Active Open	Tested on 3/28/96. Results were satisfactory.
CC-322A	Chiller Discharge to CCW Pump Suction Header	Active Open	Tested on 3/16/96. Results were satisfactory.
CC-322B	Chiller Discharge to CCW Pump Suction Header	Active Open	Tested on 3/28/96. Results were satisfactory.
CC-636	Letdown Heat Exchanger Temperature Control Valve	Active Closed	Tested on 5/11/96. Results were satisfactory.
CS-106A	Containment Spray Riser Level Pump "A" Discharge Check	None	It was determined that this valve does not have a safety function. DBD-024 was changed to reflect this.
CS-106B	Containment Spray Riser Level Pump "B" Discharge Check	None	It was determined that this valve does not have a safety function. DBD-024 was changed to reflect this.
CS118A	Shutdown Cooling Heat Exchanger "A" Outlet Isolation to RWSP	Leak Test	Leak-tested on 3/2/96. The leakrate for this valve was 0 gpm.
CS118B	Shutdown Cooling Heat Exchanger "B" Outlet Isolation to RWSP	Leak Test	Leak-tested on 3/2/96. The leakrate for this valve was 0.003785 gpm.
CS-128A	Containment Spray Pump "A" Discharge to Header Check	Active Closed	Relief Request 3.1.30 allows for disassembly and exercising of this check valve during refueling outages instead of performing quarterly testing. An inspection was performed during RF7 and results were satisfactory.
CS-128B	Containment Spray Pump "B" Discharge to Header Check	Active Closed	Relief Request 3.1.30 allows for disassembly and exercising of this check valve during refueling outages instead of performing quarterly testing. An inspection was performed during RF6 and results were satisfactory.

ATTACHMENT 5

TESTING STATUS OF COMPONENTS WITH DISCREPANCIES BETWEEN REVISION 0 OF DBD-24 AND REVISION 7, CHANGE 10 OF THE IST PLAN

UNID	Valve Name	Additional Test Req.	Test Results
CS-129A	Containment Spray Header "A" Riser Check Bypass	Active Closed	Tested on 3/22/96. Results were satisfactory.
CS-129B	Containment Spray Header "B" Riser Check Bypass	Active Closed	Tested on 3/22/96. Results were satisfactory.
CVR-302A	Containment/Annulus Differential Pressure Sample Line Check	Active Open and Active Closed	Tested on 7/20/96. The valve was failed in the open position, was subsequently replaced, and retested satisfactorily.
CVR-302B	Containment/Annulus Differential Pressure Sample Line Check	Active Open and Active Closed	Tested on 7/19/96. The valve was failed in the open position, was subsequently replaced, and retested satisfactorily.
EFW-2191A	Emergency Feedwater Pump Discharge Check to Steam Generators	Active Closed	Tested on 3/2/96. Results were satisfactory.
EFW-2191B	Emergency Feedwater Pump Discharge Check to Steam Generators	Active Closed	Tested on 3/2/96. Results were satisfactory.
NG-161A	Safety Injection Tank 1A Nitrogen Supply Control Valve	Active Closed	Tested on 5/31/96. Results were satisfactory.
NG-161B	Safety Injection Tank 1B Nitrogen Supply Control Valve	Active Closed	Tested on 5/31/96. Results were satisfactory.
NG-162A	Safety Injection Tank 2A Nitrogen Supply Control Valve	Active Closed	Tested on 5/31/96. Results were satisfactory.
NG-162B	Safety Injection Tank 2B Nitrogen Supply Control Valve	Active Closed	Tested on 5/31/96. Results were satisfactory.
SI-120A	LPSI Pump "A", HPSI Pump "A" and "AB", and Containment Spray Pump A Minimum Flow Isolation	Leak Test	Tested on 6/28/96. The leakrate for this valve was 0.032 gpm.
SI-120B	LPSI Pump "B", HPSI Pump "B", and Containment Spray Pump B Minimum Flow Isolation	Leak Test	Tested on 6/28/96. The leakrate for this valve was 0 gpm.
SI-121A	LPSI Pump "A", HPSI Pump "A" and "AB", and Containment Spray Pump A Minimum Flow Isolation	Leak Test	Tested on 6/28/96. The leakrate for this valve was 0 gpm.
SI-121B	LPSI Pump "B", HPSI Pump "B", and Containment Spray Pump B Minimum Flow Isolation	Leak Test	Tested on 6/28/96. The leakrate for this valve was 0 gpm.
SI-129A	Shutdown Cooling Heat Exchanger "A" Bypass	None	Test requirements for this valve have been correctly listed in the IST Plan in the past. An editorial error in DBD-024 was corrected to show the valve as Passive Open instead of Active Open.
SI-417A	Shutdown Cooling Heat Exchanger "A" to RWSP Isolation	Leak Test	Leak-tested on 3/3/96. The leakrate for this valve was 0 gpm.
SI-417B	Shutdown Cooling Heat Exchanger "B" to RWSP Isolation	Leak Test	Leak-tested on 3/3/96. The leakrate for this valve was 0.087 gpm.

Enclosure 3

NRC HANDOUT

PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA

CONFERENCE WITH ENTERGY OPERATIONS, INC.

NOVEMBER 20, 1996

NRC REGION IV, ARLINGTON, TEXAS

1. INTRODUCTIONS/OPENING REMARKS - S. J. COLLINS, DEPUTY REGIONAL ADMINISTRATOR
2. ENFORCEMENT PROCESS - G. M. VASQUEZ, ENFORCEMENT SPECIALIST
3. APPARENT VIOLATIONS & REGULATORY CONCERNS - K. E. BROCKMAN, DEPUTY DIRECTOR, DIVISION OF REACTOR SAFETY
4. LICENSEE PRESENTATION - M. SELLMAN, VICE PRESIDENT, OPERATIONS, AND OTHERS
5. BREAK (10-MINUTE NRC CAUCUS IF NECESSARY)
6. RESUMPTION OF CONFERENCE
7. CLOSING REMARKS - M. SELLMAN
8. CLOSING REMARKS - S. J. COLLINS

APPARENT VIOLATIONS*

PREDECISIONAL ENFORCEMENT CONFERENCE

ENTERGY OPERATIONS, INC.
WATERFORD STEAM ELECTRIC STATION, UNIT 3

NOVEMBER 20, 1996

**NOTE: THE APPARENT VIOLATIONS DISCUSSED AT THIS PREDECISIONAL ENFORCEMENT
CONFERENCE ARE SUBJECT TO FURTHER REVIEW AND MAY BE REVISED PRIOR TO ANY
RESULTING ENFORCEMENT ACTION.*

APPARENT VIOLATION

1. Criterion XVI of Appendix B to 10 CFR Part 50 requires establishment of measures to assure that conditions adverse to quality, such as deficiencies, deviations, and nonconformances, are promptly identified and corrected.

Contrary to the above, since commercial operations began in 1985 until testing was performed during January through July 1996, the licensee's established measures did not assure prompt identification and correction of conditions adverse to quality, as described below:

- a. The licensee failed, after identification in March 1994, to include and test 13 ASME Code safety-related valves subject to testing in the inservice test plan to assess operational readiness as required by 10 CFR 50.55a.
- b. The licensee failed, after identification in March 1994, to perform all ASME Code required tests on 23 ASME Code safety-related valves that were in the inservice test plan (i.e., they had either not been tested or exercised to verify their ability to fulfill all identified safety functions or, in the case of Category A valves, had not been leak tested).
- c. The licensee failed to identify the need for testing two valves that had a closed safety function, and which subsequently failed their initial leakrate test in July 1996. The licensee determined that under those conditions, both control room doses and offsite doses could have been exceeded had a design basis loss-of-coolant accident occurred, assuming loss of the downstream nonessential line and a single active failure of the upstream isolation valve.

THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW AND MAY BE REVISED

APPARENT VIOLATION

2. Technical Specification 6.8.1.a requires, in part, that written procedures be implemented for those activities referenced in Appendix A, "Quality Assurance Program Requirements," of Regulatory Guide 1.33, Revision 2, February 1978. Section 8 of Appendix A requires that the licensee have surveillance procedures.

Surveillance Procedure OP-903-035, "Containment Spray Pump Operability Check," Revision 8, Step 7.1.23, requires Valve CS-118A, "Shutdown Cooling Heat Exchanger A Outlet Isolation to Refueling Water Storage Tank," to be closed and locked following completion of the Train A containment spray pump operability check.

Contrary to the above, licensee personnel failed to fully close Valve CS-118A in accordance with Step 7.1.23 in Procedure OP-903-035, following the September 19, 1995, containment spray pump operability check, until discovery on November 11, 1995. Subsequent testing on September 7, 1996, determined that, had this condition existed during a design basis loss-of-coolant accident, the quantified backleakage from the containment sump to the refueling water storage tank would have exceeded the backleakage limit established in the Final Safety Analysis Report. As a consequence, the control room thyroid dose limits specified in Criterion 19 of Appendix A to 10 CFR Part 50 could have been exceeded.

THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW AND MAY BE REVISED

APPARENT VIOLATION

3. 10 CFR 50.59(a)(1) allows, in part, the holder of a license to make changes to the facility as described in the safety analysis report unless the proposed change involves an unreviewed safety question.

10 CFR 50.59(b)(1) requires, in part, the licensee to maintain records of changes in the facility, to the extent that these changes constitute changes in the facility as described in the safety analysis report. The records must include written safety evaluations which provide the bases for the determinations that the changes do not involve unreviewed safety questions.

In response to NRC FSAR Question 480.36, which requested additional justification for not including Containment Penetrations 53 and 65 in a 10 CFR Part 50, Appendix J, Type C leak testing program, the licensee stated that the containment vacuum relief instrumentation lines through those penetrations formed a closed system outside of containment, were seismically qualified, and terminated in an area exhausted through filters of the Controlled Ventilation Area System.

This response was used by the NRC in Safety Evaluation Report "Waterford Steam Electric Station, Unit 3, NUREG-0787," dated July 1981, as the basis for accepting the design configuration and testing requirements for those penetrations, including not requiring Type C testing of the containment isolation valves in those instrument lines.

Contrary to the above, since commercial operations began in 1985, the actual design configuration of the Containment Vacuum Relief System was different from that described in the licensee's response to FSAR Question 480.36, and the licensee did not perform the required written safety evaluation to provide the bases for a determination that the deviation from the response to FSAR Question 480.36 did not involve an unreviewed safety question. Specifically, it was identified that the containment vacuum relief instrument lines terminated at a location which was not within the Controlled Ventilation Area System or any other filtration system for post-accident operation. Further, the containment vacuum relief monitoring lines did not meet the design criteria for a closed system outside of containment, and they were not seismically qualified. As a consequence of this failure, the licensee failed to:

1. Meet General Design Criterion 56 requirements by not providing the specified containment isolation barriers in the containment vacuum relief monitoring lines.
2. Perform Technical Specification Surveillance Requirement 4.6.1.2.d on the containment isolation valves located in the containment vacuum relief system monitoring lines, thus Containment Penetrations 53 and 65 had never been leak tested for secondary containment bypass leakage.

THIS APPARENT VIOLATION IS SUBJECT TO FURTHER REVIEW AND MAY BE REVISED