NOTICE OF VIOLATION

Southern Nuclear Operating Company, Inc.
Farley Nuclear Power Plant
Units 1 and 2

Docket Nos.: 50-348 and 50-364
License Nos.: NPF-2 and NPF-8
EA 97-130

During NRC inspections completed on March 14, 1997, violations of NRC requirements were identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

A. 10 CFR Part 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

Contrary to the above, prior to March 14, 1997, the licensee failed to prescribe documented instructions or procedures to implement the following activities affecting quality with regard to operation of the penetration room filtration (PRF) system:

1. Procedural steps to monitor penetration room-to-atmosphere negative pressure were not prescribed in emergency operating procedures. Monitoring penetration room-to-atmosphere negative pressure is an activity affecting quality in that a negative pressure is required to meet the intended safety function of the system during emergency conditions as described in Final Safety Analysis Report (FSAR) Section 6.2.3.1.2. FSAR Section 6.2.3.1.2 states, in part, that a function of the PRF system is to maintain a slightly negative pressure within the penetration room and that this negative pressure ensures inleakage to the penetration room, preventing exfiltration of radioactivity to the environment. For example, Step 3 of FNP-1/2-ESP-1.1, SI Termination, directs securing one train of the PRF system (if actuated), but does not direct monitoring the remaining PRF system train to ensure that it maintains adequate negative penetration room-to-atmosphere differential pressure.

2. Procedural steps to govern operation of the PRF system during recirculation operations were not provided in normal operating, testing, or emergency operating procedures. Recirculation operation is an activity affecting quality in that instructions for system alignment, testing and emergency operation are needed to implement multipass filtration of long term containment leakage. Multipass filtration is a function of the PRF system as described in FSAR Section 6.2.3.2.2. For example, FNP-1/2-STP-124.0, Penetration Room Filtration Performance Test, (STP-124.0), Step 6.3, states that the Penetration Room Filtration System Train to be tested is aligned per FNP-1/2-SOP-60.0,(SOP-60.0), Penetration Room Filtration System. However SOP-60.0 does not define system configurations or provide operator guidance for alignment for surveillance tests or post-loss of coolant accident

Enclosure 1

(LOCA) system operation in the "recirc mode." STP-124.0 was also inadequate in that Step 7.5 directed operations to start the PRF system train to be tested and align it in the recirculation mode, but did not contain steps that define the recirculation mode or the configuration of the system for the recirculation mode.

3. Procedural steps were not prescribed to ensure that the test described in STP-124.0 was run in the sequence required by TS 4.7.8.b.1(a). The sequence of the visual inspection of the PRF system, the Dioctyl-phthalate (DOP) test, and the activated carbon adsorber section leak test is an activity affecting quality in that conducting the visual inspection after the DOP or carbon adsorber leak test can invalidate the integrity of the PRF system established in the DOP test and the carbon adsorber leak test. Technical Specification (TS) 4.7.8, Penetration Room Filtration System, part b.1(a), states that a visual inspection of the penetration room filtration system shall be made before each DOP test or activated carbon adsorber section leak test in accordance with Section 5 of ANSI N510-1980. As a result, during performance of STP-124.0 on January 25, 1997, the visual inspection of the penetration room filtration system was not conducted prior to the HEPA filter and charcoal filter leak tests as required by TS 4.7.8.b.1(a).

4. STP-124.0 did not provide adequate steps to ensure that the test readings of the air flow through the PRF system, as described in Step 7.6 of STP-124.0, were consistently recorded. Obtaining accurate readings of the air flow through the PRF system is an activity affecting quality in that accurate air flow readings are required to determine whether the system meets TS surveillance requirement (SR) 4.7.8. TS SR 4.7.8, Penetration Room Filtration System, part b.3, requires, at least once per 18 months or during other specified conditions, verifying the PRF system flow rate of 5000 cfm ± 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980. As a result, several data packages which documented 1995 performances of the flow tests for STP-124.0 had discrepancies in the manner in which the air flow test data was recorded. The discrepancies included transposition errors which resulted in using the incorrect duct size for the calculations. (01014)

This is a Severity Level IV violation (Supplement I).

B. TS surveillance requirement (SR) 4.7.8, Penetration Room Filtration System, part b.3, requires, at least once per 18 months or during other specified conditions, verifying the PRF system flow rate of 5000 cfm ± 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980.

ANSI N510-1980, Testing of Nuclear Air-Cleaning Systems, Section 8.3.1, Airflow Capacity Test, steps 8.3.1.6 and 8.3.1.7, describe performing "dirty filter" flow tests as part of the Section 8 airflow capacity test.

TS SR 4.7.8.b.1.a requires a visual inspection of PRF system filters in accordance with Section 5 of ANSI N510-1980 every 18 months; and TS SR 4.7.8.d.3 requires PRF system heater testing in accordance with Section 14 of ANSI N510-1980 every 18 months.

TS SR 4.7.7.1, Control Room Emergency Filtration System (CREFS), requires visual filter inspections in accordance with Section 5 of ANSI N510-1980, system flow verifications in accordance with Section 8 of ANSI N510-1980, and pressurization system heater testing in accordance with Section 14 of ANSI N510-1980 every 18 months.

TS SR 4.9.14 requires a visual inspection of the Containment Purge exhaust filter in accordance with Section 5 of ANSI N510-1980 every 18 months.

Contrary to the above, between plant licensing and January 28, 1997, the licensee failed to test PRF system operation in accordance with Section 8 of ANSI N510-1980. Specifically, system flow rate testing did not include "dirty filter" flow tests as described by ANSI N510-1980, Section 8. In addition, on February 23, 1997, the licensee determined that surveillance testing to demonstrate compliance with TS Surveillance Requirements 4.7.7.1, 4.7.8, and 4.9.14 was inadequate in that Section 8 "dirty filter" testing for CREFS, and other parts of ANSI N510-1980 Sections 5 and 14 for CREFS, the PRF system, and Containment Purge exhaust, were not included in their surveillance test program. (02014)

This is a Severity Level IV violation (Supplement I).

C. 10 CFR 50, Appendix B, Criterion XVI, and the J. M. Farley Plant Operations Quality Assurance Policy Manual, states, in part, that measures shall be established to assure that conditions adverse to quality are promptly identified and corrected. In the case of significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective action taken to preclude repetition.

FSAR section 6.2.3.1.2 describes the criteria used to determine PRF system design flow rates. It states, "The exhaust flow rate is equivalent to the penetration room boundary inleakage; i.e., the sum of all possible inleakages when a pressure of -1.5 in. wg [inches water gauge] is maintained within the penetration room boundary." Furthermore, it states, "for estimating the exhaust fan capacity, it has been conservatively assumed that, with a -1.5 inches wg pressure, the inleakage is 100 percent of the penetration room volume per day. This inleakage is equivalent to 250 scfm."

FSAR section 6.2.3.3.2, states, "The penetration rooms are maintained at a pressure of -0.5 to -1.5 in. wg with only the exhaust fan operating. If the recirculation fan were to remain in operation in the exhaust mode, the pressure in the penetration rooms could be maintained at -3.0 in. wg."

FNP-1/2-STP-20.0, Penetration Room Filtration System Train A(B) Operability Test, Page 5, Note, described desired system performance of the PRF system upon switchover from the pure exhaust mode to recirculation operation including system operation with the recirculation fan in operation in the exhaust mode. The Note directs operators, that if the PRF system does not function in the manner described in the Note, to investigate and initiate corrective action if corrective action is required.

Contrary to the above, as of January 25, 1997, the licensee had failed to establish measures to assure that a significant condition adverse to quality was promptly identified and corrected. Specifically, the licensee failed to identify that the penetration room boundary had degraded such that inleakage was greater than 4000 scfm on Unit 1 and greater than 2000 scfm on Unit 2, which was in excess of the 250 scfm described in the FSAR. As a result, neither unit's PRF system was capable of maintaining -0.5 to -1.5 inches wg with only the exhaust fan running and Unit 1 could not maintain -3.0 inches wg in the penetration rooms with the recirculation fan also in the exhaust mode as described in FSAR Section 6.2.3.3.2. Furthermore, the licensee failed to obtain necessary data in the configurations described in STP-20.0 to determine if system performance warranted an investigation and initiation of corrective action. (03014)

This is a Severity Level IV violation (Supplement I).

D. TS 3.9.13 requires that two independent penetration room filtration systems (Specification 3.7.8) shall be OPERABLE and aligned to the spent fuel pool room during crane operation with loads, over the fuel in the spent fuel pit and during fuel movement within the spent fuel pit.

Contrary to the above, on October 31, 1996, the licensee performed fuel movement within the Unit 2 spent fuel pit with the A train Penetration Room Filtration (PRF) system inoperable and the B train PRF not aligned to the spent fuel pool room. (04014)

This is a Severity Level IV violation (Supplement I).

Pursuant to the provisions of 10 CFR 2.201, the Southern Nuclear Operating Company, Inc. (Licensee) is required to submit a written statement or explanation to the U. S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D. C. 20555 with a copy to the Regional Administrator, Region II, and a copy to the NRC Resident Inspector at the Farley facility, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved,

(3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Dated at Atlanta, Georgia
this 6th day of May 1997

List of Conference Attendees

Southern Nuclear Operating Company, Inc.

J. Woodard, Executive Vice President, Southern Nuclear Operating Company, Inc. (SNC)
D. Moray, Vice President, Nuclear, SNC
C. McCoy, Vice President, Vogtle Electric Generating Station
R. Hill, Nuclear Plant General Manager, Farley Nuclear Plant (FNP)
D. Grissette, Operations Manager, FNP
M. Ajluni, Licensing Manger, SNC
J. Thomas, Engineering Support Manager, SNC
J. Sims, Project Engineer, SNC
J. McGowan, Manager, Safety Assessment and Evaluation Review, FNP
J. Dews, Plant Operator, FNP
R. Morris, Senior Engineer, SNC
A. Domby, Attorney, Troutman and Sanders
J. Garlington, Nuclear Support, SNC
J. Love, Bechtel

Nuclear Regulatory Commission

L. Reyes, Regional Administrator, Region II (RII)
R. Crlenjak, Acting Deputy Director, Division of Reactor Projects (DRP), RII
D. Collins, Acting Deputy Director, Division of Reactor Safety (DRS), RII
P. Skinner, Chief, Reactor Projects Branch 2, DRP, RII
C. Evans, Regional Counsel, RII
T. Ross, Senior Resident Inspector, Farley Nuclear Plant, DRP, RII
J. Bartley, Resident Inspector, Farley Nuclear Plant, DRP, RII
D. Nelson, Enforcement Coordinator, Office of Enforcement*
L. Watson, Enforcement Specialist, EICS, RII
M. Ernstes, Project Engineer, DRP, RII
K. O'Donohue, Resident Inspector, Vogtle Electric Generating Station, DRP, RII
F. Young, Transportation Specialist, Office of Nuclear Material Safety and Safeguards

*Participated by telephone.

Enclosure 2

PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA

FARLEY

APRIL 18, 1997, AT 10:00 A.M.

NRC REGION II OFFICE, ATLANTA, GEORGIA

I. OPENING REMARKS AND INTRODUCTIONS
L. Reyes, Regional Administrator

II. NRC ENFORCEMENT POLICY
B. Uryc, Director
Enforcement and Investigation Coordination Staff

III. SUMMARY OF THE ISSUES
L. Reyes, Regional Administrator

IV. STATEMENT OF CONCERNS / APPARENT VIOLATION
R. Crlenjak, Acting Deputy Director, Division of Reactor Projects

V. LICENSEE PRESENTATION

VI. BREAK / NRC CAUCUS

VII. NRC FOLLOWUP QUESTIONS

VIII. CLOSING REMARKS
L. Reyes, Regional Administrator

Enclosure 3

APPARENT VIOLATIONS

A. 10 CFR 50.73(a)(1) requires that the licensee submit a Licensee Event Report (LER) for any event of the type described in this paragraph within 30 days after the discovery of the event.

10 CFR 50.73(a)(2)(i)(B) requires that the licensee report any operation or condition prohibited by the plant's Technical Specifications (TS).

TS 3.9.13 requires that two independent penetration room filtration systems shall be OPERABLE (Specification 3.7.8) and aligned to the spent fuel pool room during crane operation with loads, over the fuel in the spent fuel pit and during fuel movement within the spent fuel pit.

On October 31, 1996, fuel movement was performed in the Unit 2 spent fuel pit with the A train Penetration Room Filtration (PRF) system inoperable and the B train PRF not aligned to the spent fuel pool room. This was a condition prohibited by the TS which has not been reported as of this date.

NOTE: THE APPARENT VIOLATIONS DISCUSSED IN THIS PREDECISIONAL ENFORCEMENT CONFERENCE IS SUBJECT TO FURTHER REVIEW AND IS SUBJECT TO CHANGE PRIOR TO ANY RESULTING ENFORCEMENT DECISION.

B. 10 CFR Part 50, Appendix B, Criterion V requires that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings.

FSAR Section 6.2.3.1.2 describes that a function of the PRF system is to maintain a slightly negative pressure with the penetration room to prevent exfilitration of radioactivity to the environment.

FSAR Section 6.2.3.2.2 states that in the event of a LOCA, the penetration room filtration system will be manually realigned to operate in the LOCA mode prior to the end of injection and will operate automatically as describe below. It further states that when either a two out of three differential pressure signal of -2 in. or a recirculation line valve open signal is annunciated in the control room, the operator closes the valve at the discharge of the recirculation fan and the analysis of the combined system (fans vs. inleakage) indicates a setpoint of -2 in. wg pressure to be used for switching to recirculation operation.

FSAR Section 6.2.3.3.2, also discusses operating the PRF system in the recirculation mode or the exhaust mode.

FSAR Section 15.4.1.10, Environmental Consequences of Emergency Core Cooling System Leakage or Failure Outside Containment After a Loss-of-Coolant Accident, states, in part, that doses due to a failure in the recirculation loop are based on a RHR pump seal failure and that the NRC took credit for the RHR pump rooms being exhausted through the penetration room filtration system during the recirculation phase of a LOCA and, therefore, offsite doses from possible pump leakage would be within the NRC acceptance criteria of 10 CFR Part 100. This documents the safety function of the Penetration Filtration System for post-LOCA operation.

Alabama Power Company Drawing D-205013, HVAC: Process Flow Diagram Penetration Filtration System, provides expected flows and lineups for various system modes. This drawing specifically identifies Post LOCA Recirc Mode and Post LOCA Exhaust Mode as PRF system configurations which corresponds with the system operation described in the FSAR.

NOTE: THE APPARENT VIOLATIONS DISCUSSED IN THIS PREDECISIONAL ENFORCEMENT CONFERENCE IS SUBJECT TO FURTHER REVIEW AND IS SUBJECT TO CHANGE PRIOR TO ANY RESULTING ENFORCEMENT DECISION.

The NRC identified that operating and emergency procedural guidance for operating the PRF system during normal operation, testing, or emergency conditions to ensure that it performs its safety function (e.g., SCP-60.0, ESP-1.1, ESP-1.3, and STP-20.0 and STP-124.0) was inadequate.

1. FNP-1/2-ESP-1.3, Transfer to Cold Leg Recirculation:

   - Did not provide guidance to ensure that the PRF system was operating prior to initiating cold leg recirculation for LOCA conditions which did not cause a phase "B" actuation. Interviews with operators indicated that they were not aware that the PRF system was required to be in operation prior to transfer to cold leg recirculation.

   - Did not provide direction to monitor PRF system performance to ensure that a penetration room-to-atmosphere negative pressure was maintained. Maintaining the penetration rooms at a negative pressure is the safety function of the PRF system.

   - Did not provide any operator guidance for post-LOCA system operation in the "recirc mode," as described in the FSAR and in the plant drawing.

2. FNP-1/2-ESP-1.1, SI Termination, and FNP-1/2-ESP-1.2, Post LOCA Cooldown and Depressurization :

   ESP-1.1, Step 3, and ESP-1.2, Step 4, direct securing one train of the PRF system (if actuated), but does not direct monitoring the remaining PRF system train to ensure that it maintains adequate negative penetration room-to-atmosphere differential pressure. Therefore, the procedure would have directed the operator to secure the system without ensuring that the remaining train was performing its safety function.

3. FNP-1/2-SOP-60.0, Penetration Room Filtration System:

   Did not define system configurations or provide operator guidance for surveillance tests and post-LOCA system operation in the "recirc mode," as described in the FSAR and the plant drawing.

NOTE: THE APPARENT VIOLATIONS DISCUSSED IN THIS PREDECISIONAL ENFORCEMENT CONFERENCE IS SUBJECT TO FURTHER REVIEW AND IS SUBJECT TO CHANGE PRIOR TO ANY RESULTING ENFORCEMENT DECISION.

4. FNP-1/2-STP-124.0, Penetration Room Filtration Performance Test:

- Did not provide adequate guidance to ensure that the test was consistently run in the required system configuration. Consequently, seven data packages which documented 1995 performances of the flow tests for STP-124.0 had discrepancies in the manner in which the air flow test data was recorded. An evaluation of test data found four data transposition errors (which resulted in using the incorrect duct size for the calculations) and one mathematical error in the 1992 tests.

- Did not provide guidance to ensure that the test was run in the TS-required sequence. As a result, on January 25, 1997, the visual inspection was not conducted prior to the HEPA filter and charcoal filter leak tests. Not addressing this requirement caused the performance of STP-124.0 to be invalid. The licensee staff was not aware that the TS required that the visual inspection be performed first until informed by the inspector.

- Step 7.5 of the procedure directed operations to start the PRF system train to be tested and align it in the recirculation mode. However, the STP did not contain guidance that defines the recirculation mode nor for configuring the system for the recirculation mode.

5. FNP-1/2-STP-20.0, Penetration Room Filtration System Train A(B) Operability Test:

A "Note" in the procedure contained information about the design function of the PRF system in the pure exhaust mode and recirculation mode and directed corrective action if the system performed differently. However, the STP did not require operators to obtain necessary data in the described configurations to verify the system performance. The performance criteria and corrective actions were specified to identify excessive penetration room boundary inleakage.

NOTE: THE APPARENT VIOLATIONS DISCUSSED IN THIS PREDECISIONAL ENFORCEMENT CONFERENCE IS SUBJECT TO FURTHER REVIEW AND IS SUBJECT TO CHANGE PRIOR TO ANY RESULTING ENFORCEMENT DECISION.

C. TS SR 4.7.8.b.3 requires verifying system flow rate of 5000 cfm $\pm$ 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980.

FNP-2-STP-124.0, Penetration Room Filtration Performance Test, implements the testing requirements of TS surveillance requirement 4.7.8.b.3.

On December 1, 1992, the Unit 2 Train A PRF system flow rate was measured per STP-124.0, as 5615 cfm, which was outside the acceptance criteria. However, the LCO was not entered. This condition was not recognized by the licensee until January 15, 1997, due to transposition errors in the test data. The licensee identified the error while performing an STP-124.0 data review requested by the NRC. The Unit 2 Train A PRF flow was verified to be satisfactory on May 18, 1994.

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D. TS SR 4.7.8.b.3 requires verifying the PRF system flow rate of 5000 cfm ± 10% during system operation when tested in accordance with Section 8 of ANSI N510-1980 every 18 months.

ANSI N510-1980, Testing of Nuclear Air-Cleaning Systems, Section 8.3.1, Airflow Capacity Test, steps 8.3.1.6 and 8.3.1.7, describe performing "dirty filter" flow tests as part of the Section 8 airflow capacity test.

TS SR 4.7.8.b.1.a requires a visual inspection of PRF system filters in accordance with Section 5 of ANSI N510-1980 every 18 months; and TS SR 4.7.8.d.3 requires PRF system heater testing in accordance with Section 14 of ANSI N510-1980 every 18 months.

To demonstrate CREFS operability, TS SR 4.7.7.1 requires visual filter inspections in accordance with Section 5 of ANSI N510-1980, system flow verifications in accordance with Section 8 of ANSI N510-1980, and pressurization system heater testing in accordance with Section 14 of ANSI N510-1980 every 18 months.

TS SR 4.9.14 requires a visual inspection of the Containment Purge exhaust filter in accordance with Section 5 of ANSI N510-1980 every 18 months.

On January 28, 1997, the NRC identified that the system flow rate testing accomplished by STP-124.0 did not perform "dirty filter" flow tests as described by ANSI N510-1980, Section 8. Furthermore, the NRC verified that the "dirty filter" tests had never been performed as part of the surveillance testing program. The Unit 1 and 2 PRF system "dirty filter" testing was commenced on February 19 and completed on February 21, 1997. Furthermore, on February 23, the licensee determined that the Section 8 "dirty filter" testing for CREFS, along with numerous parts of ANSI N510-1980 Sections 5 and 14 for CREFS, the PRF system, and Containment Purge exhaust, were not included in their surveillance test program.

NOTE: THE APPARENT VIOLATIONS DISCUSSED IN THIS PREDECISIONAL ENFORCEMENT CONFERENCE IS SUBJECT TO FURTHER REVIEW AND IS SUBJECT TO CHANGE PRIOR TO ANY RESULTING ENFORCEMENT DECISION.

E. 10 CFR 50.59 allows the licensee to make changes to the facility as described in the FSAR as long as an unreviewed safety question does not exist.

FSAR section 6.2.3.1.2 describes the criteria used to determine PRF system design flow rates. It states that the exhaust flow rate is equivalent to the penetration room boundary inleakage; i.e., the sum of all possible inleakages when a pressure of -1.5 in. wg is maintained within the penetration room boundary. It also states that minimizing the penetration room inleakage increases the system effectiveness. Furthermore, it states that for estimating the exhaust fan capacity, it has been conservatively assumed that, with a -1.5 inches wg pressure, the inleakage is 100 percent of the penetration room volume per day. This inleakage is equivalent to 250 scfm.

FSAR section 6.2.3.3.2 states that the penetration rooms are maintained at a pressure of -0.5 to -1.5 in. wg with only the exhaust fan operating. If the recirculation fan were to remain in operation in the exhaust mode, the pressure in the penetration rooms could be maintained at -3.0 in. wg.

The licensee failed perform a 10 CFR 50.59 safety evaluation to address the evidence of excessive inleakage into the piping penetration room (PPR). As of January 25, 1997, the PPR boundary had degraded to the point where inleakage was greater than 4000 cfm on Unit 1 and greater than 2000 cfm on Unit 2, far in excess of the 250 cfm described in the FSAR. This condition has been evident in surveillance test data since at least 1992. Also, neither unit's PRF system was capable of maintaining -0.5 to -1.5 in. wg in the PPR with only the exhaust fan running. Furthermore, Unit 1 could not maintain -3.0 in. wg in the PPR with the recirculation fan also in the exhaust mode.

NOTE: THE APPARENT VIOLATIONS DISCUSSED IN THIS PREDECISIONAL ENFORCEMENT CONFERENCE IS SUBJECT TO FURTHER REVIEW AND IS SUBJECT TO CHANGE PRIOR TO ANY RESULTING ENFORCEMENT DECISION.

PRF ENFORCEMENT CONFERENCE
APRIL 18, 1997

I.	Opening Remarks -- NRC
II.	Opening Remarks -- D. N. Morey
III.	Overview of PRF System -- D. E. Grissette
IV.	PRF LOCA Considerations -- Mark Ajluni
V.	Penetration Room Boundary Inleakage Effects -- J. J. Thomas
VII.	Technical Specifications Requirements for ANSI -- J. J. Thomas
VIII.	STP Errors -- J. J. Thomas
IX.	Tech. Specification Interpretation on Power -- D. E. Grissette
X.	Conclusion -- D. N. Morey

PRF Discussion Items

- Starting the PRF system for SBLOCA events is not required and all LBLOCA events will auto start the system.
- Dose from SBLOCA w/o PRF below Part 100.
- Operator would likely start PRF system if no autostart occurred.

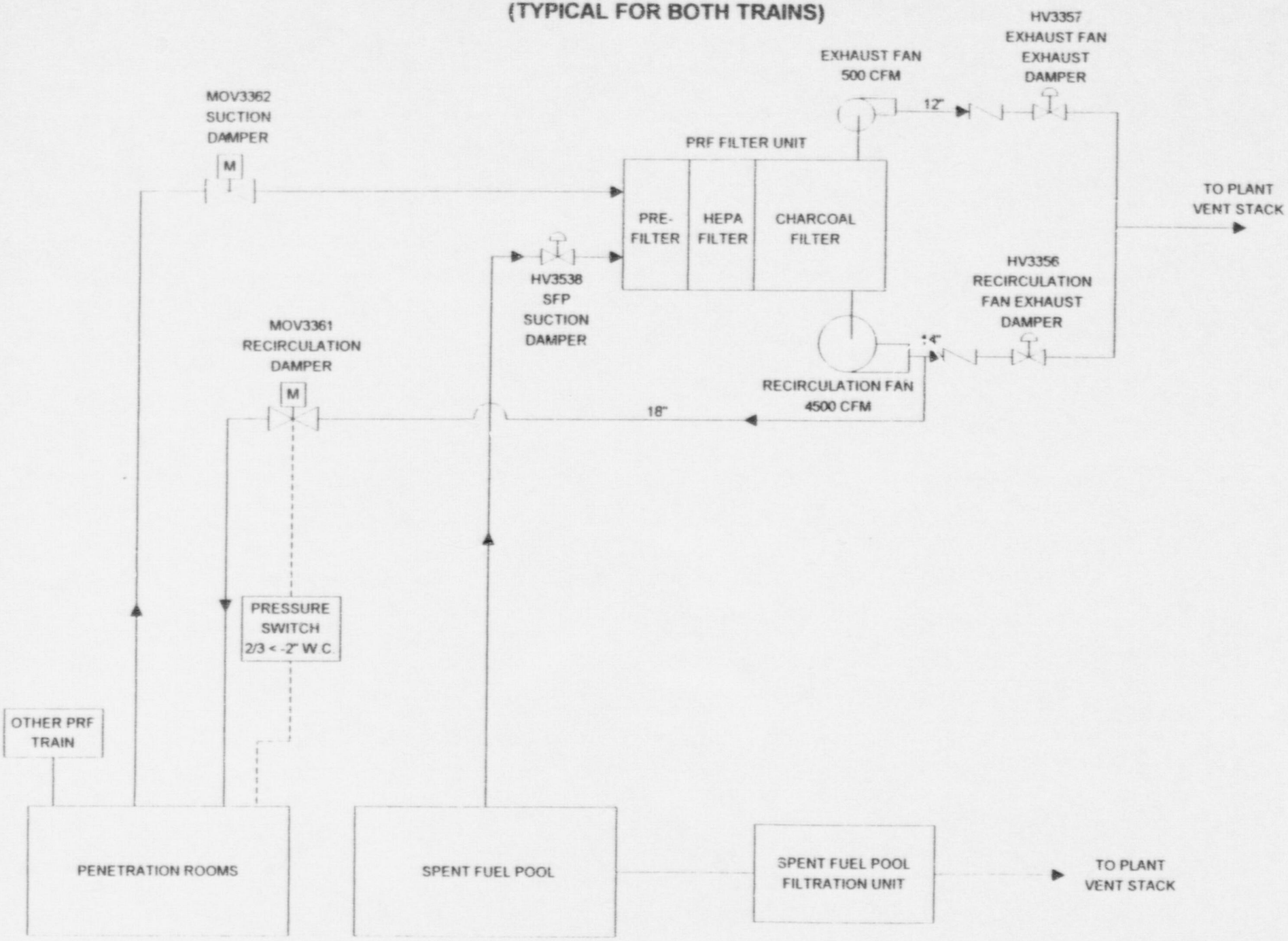
PRF Discussion Items (cont.)

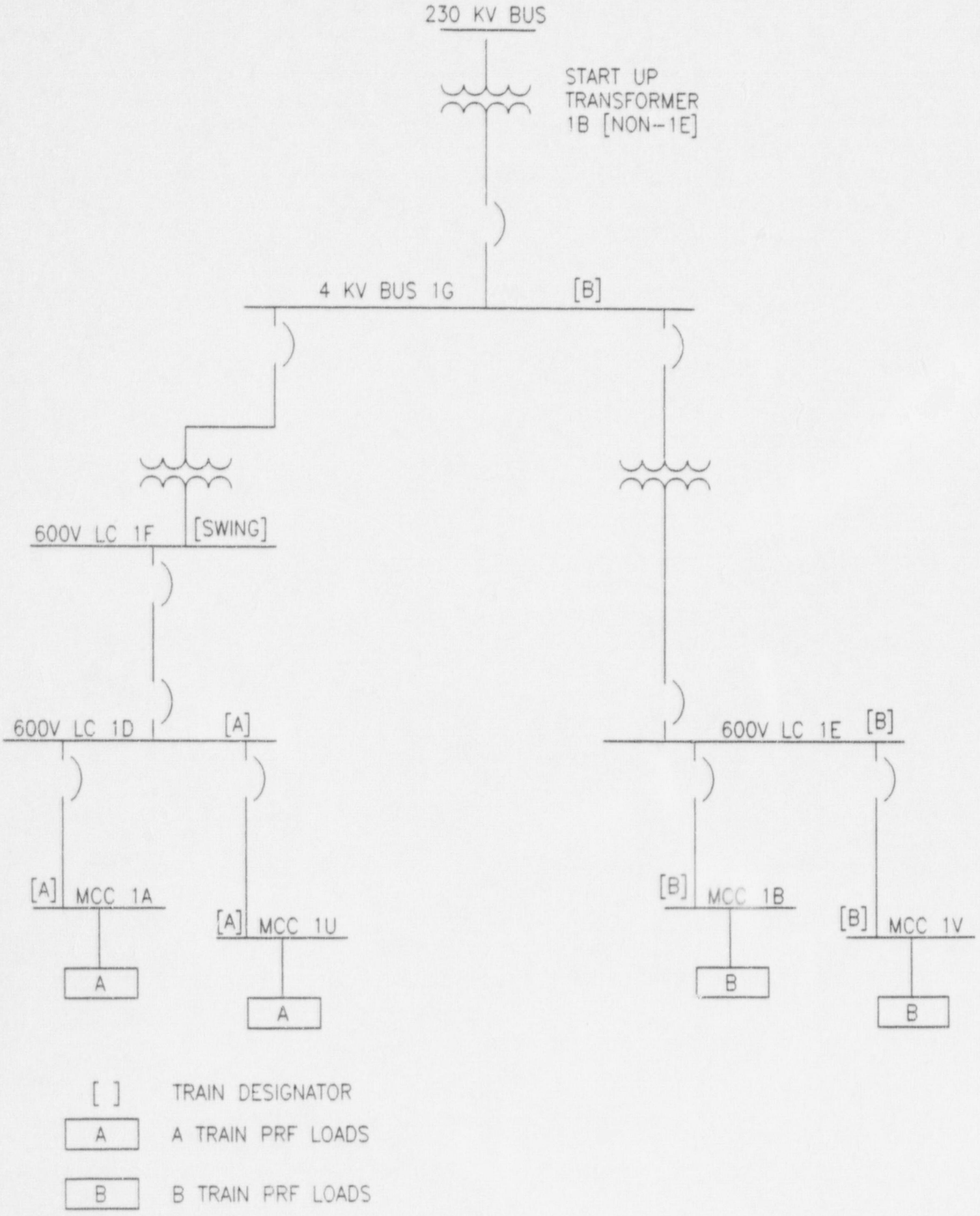
- Procedures have been enhanced with additional guidance for PRF operation and testing.
- PRB system remained operable and capable of its safety function with the inleakage and procedures as reported.
- FSAR has been clarified and will be revised further in conjunction with TS amendments.

PRF Discussion Items (cont.)

- Two Tech. Specification interpretation issues.
  - both were long standing and had clear basis
  - both were consistently applied by FNP

PENETRATION ROOM FILTRATION SYSTEM DIAGRAM
(TYPICAL FOR BOTH TRAINS)




230 KV BUS
START UP
TRANSFORMER
1B [NON--1E]
4 KV BUS 1G
[B]
600V LC 1F
[SWING]
600V LC 1D
[A]
600V LC 1E
[B]
[A]
MCC 1A
[A]
MCC 1U
[B]
MCC 1B
[B]
MCC 1V
A
A
B
B
[ ]
TRAIN DESIGNATOR
A
A TRAIN PRF LOADS
B
B TRAIN PRF LOADS

FNP CORRECTIVE ACTIONS

- SYSTEM OPERATING PROCEDURES PROMPTLY ENHANCED
- ANNUNCIATOR RESPONSE PROCEDURES PROMPTLY ENHANCED
- SURVEILLANCE TEST PROCEDURES PROMPTLY ENHANCED
- EMERGENCY RESPONSE PROCEDURES PROMPTLY ENHANCED
- OPERATOR TRAINED ON ENHANCEMENTS
- FSAR REVISED

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

TS 3.9.13 STORAGE POOL VENTILATION (FUEL MOVEMENT)

TWO INDEPENDENT PENETRATION ROOM FILTRATION SYSTEMS SHALL BE OPERABLE AND ALIGNED TO THE SPENT FUEL POOL ROOM DURING CRANE OPERATIONS WITH LOADS OVER THE FUEL IN THE SPENT FUEL PIT AND DURING FUEL MOVEMENT WITHIN THE SPENT FUEL PIT.

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

PLANT CONDITIONS

- "A" train of offsite power unavailable
- 1-2A Emergency Diesel Generator unavailable
- "A" train PRF powered from "B" train offsite power via cross connect arrangement
- "B" train PRF powered from "B" train offsite power
- 1B Emergency Diesel Generator available
- "B" Train SFP to PRF damper closed for surveillance test
- Fuel Handling activities in progress in the SFP

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

TS 3.8.1.2 AC SOURCES - SHUTDOWN

AS A MINIMUM, THE FOLLOWING AC ELECTRICAL POWER SOURCES SHALL BE OPERABLE:

A. ONE CIRCUIT FROM THE OFFSITE TRANSMISSION NETWORK TO THE SWITCHYARD AND FROM THE SWITCHYARD TO THE ONSITE CLASS 1E DISTRIBUTION SYSTEM,

AND

B. EMERGENCY DIESEL GENERATOR 1-2A OR 1C OR 1B.....

APPLICABILITY: MODES 5 AND 6

ACCIDENT ANALYSIS

FNP ACCIDENT ANALYSIS ASSUMES ONLY ONE TRAIN OF PRF AVAILABLE

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

OPERABLE - OPERABILITY

TS 1.18 A SYSTEM, SUBSYSTEM, TRAIN, COMPONENT OR DEVICE SHALL BE OPERABLE OR HAVE OPERABILITY WHEN IT IS CAPABLE OF PERFORMING ITS SPECIFIED FUNCTION(S), AND WHEN ALL NECESSARY ATTENDANT INSTRUMENTATION, CONTROLS, A NORMAL AND AN EMERGENCY ELECTRICAL POWER SOURCES, OR OTHER AUXILIARY EQUIPMENT THAT ARE REQUIRED FOR THE SYSTEM, SUBSYSTEM, TRAIN, COMPONENT, OR DEVICE TO PERFORM ITS FUNTION(S) ARE ALSO CAPABLE OF PERFORMING THEIR RELATED SUPPORT FUNTION(S).

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

FNP INTERPRETATION:

Only one train of offsite power and one source of emergency onsite power was required for operability of both trains of PRF while in modes 5 and 6.

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

- INTERPRETATION USED SINCE 1980'S
- INTERPRETATION EVALUATED BY NUCLEAR LICENSING - 1995
- FALL 1996 OUTAGE PLANNED USING INTERPRETATION
- INTERPRETATION EVALUATED BY OPERATIONS MANAGEMENT

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

- FUEL MOVEMENT IN SFP
- REACTOR OPERATORS QUESTIONED TECH SPEC COMPLIANCE
- INTERPRETATION EVALUATED BY OPERATIONS MANAGER AND OTHER LICENSED PERSONNEL
- NUCLEAR LICENSING EVALUATED INTERPRETATION

PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

- RESIDENT NRC QUESTIONED INTERPRETATION
- SNC REQUESTED NRR/NRC REVIEW OF INTERPRETATION
- SNC NOTIFIED OF NRC DISAGREEMENT WITH INTERPRETATION

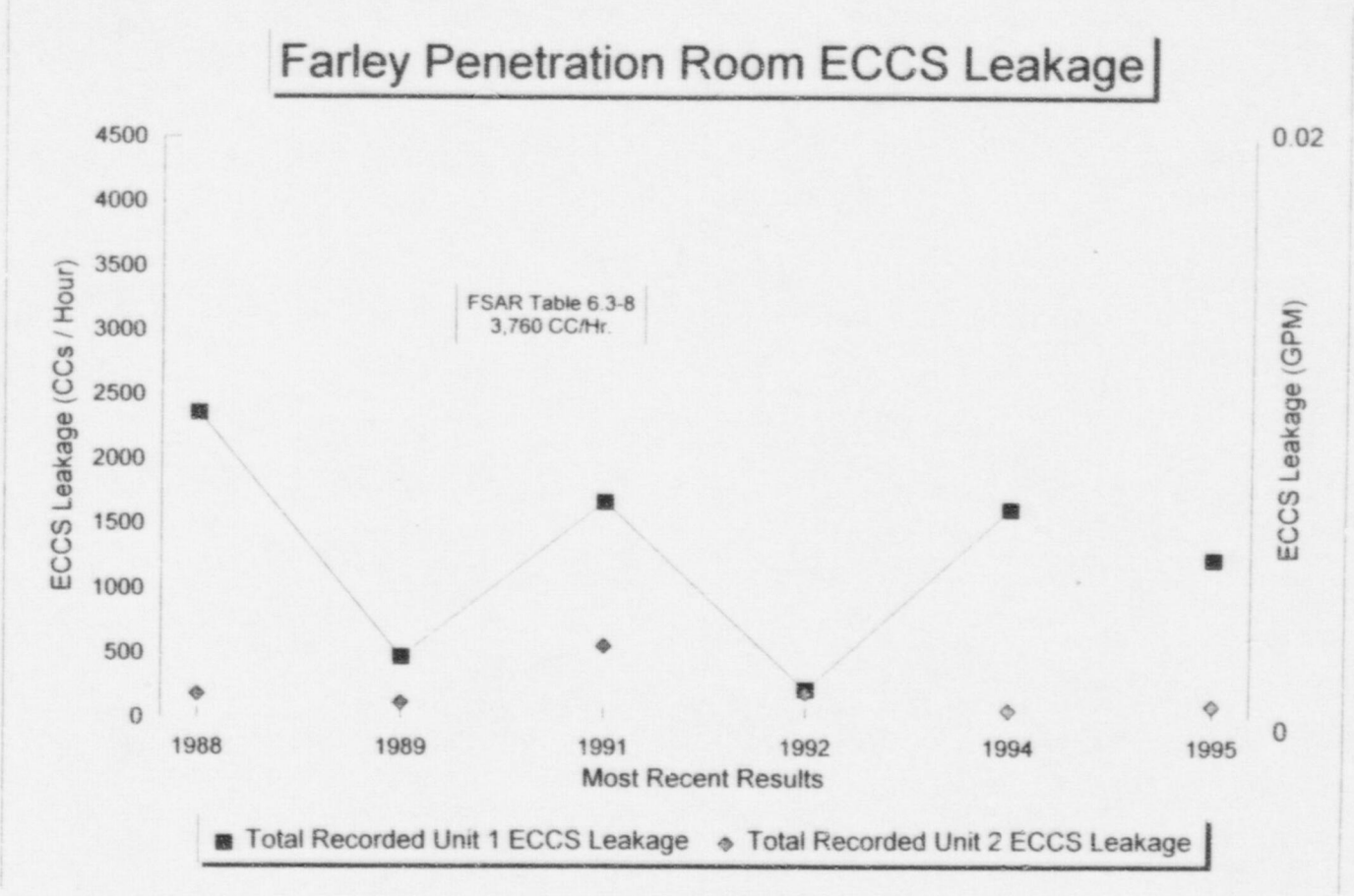
PRF POWER REQUIREMENTS

TECHNICAL SPECIFICATION INTERPRETATION

- SNC PROMPTLY REVISED INTERPRETATION TO COMPLY WITH NRC POSITION AND SUBMITTED LER
- SPRING UNIT 1 OUTAGE PLANNED PER THE NEW INTERPRETATION
- TECHNICAL SPECIFICATION AMENDMENT INITIATED

PRF Starting Significance (Mark Ajluni)

- LBLOCA with Break Size > or = 1 SQFT, PRF is Calculated to Auto Start.
- SBLOCA with Break Size < 1 SQFT, PRF is not needed to Start. 10 CFR Part 100 Limits Not Exceeded.
- Current design and procedures were adequate to ensure that 10 CFR Part 100 Limits Not Exceeded.


Farley Penetration Room ECCS Leakage
4500
4000
3500
3000
2500
2000
1500
1000
500
0
ECCS Leakage (CCs / Hour)
0.02
0
ECCS Leakage (GPM)
FSAR Table 6.3-8
3,760 CC/Hr.
1988
1989
1991
1992
1994
1995
Most Recent Results
Total Recorded Unit 1 ECCS Leakage
Total Recorded Unit 2 ECCS Leakage

Issues
(Jim Thomas)

- Penetration Room Boundary Inleakage In Excess of UFSAR Value.
- Surveillance Requirements Not Performed Per Specific N510 Section Items.
- Surveillance Test Errors.

ANSI N510

► Section 1.2 Limitations 0f the Standard

"It is the intent of this standard that it be rigorously applied only to systems designated and built to ANSI N509; however, sections of this standard may be used for technical guidance for testing of non-N509 systems."

► Table 1 .....

"Airflow Capacity and Distribution 8 Acceptance (2)"

Notes:

(2) Acceptance tests to be made after completion of initial construction and after any major system modification.

SOUTHERN COMPANY
Energy to Serve Your World

JANUARY 25, 1997
FNP-1-STP-124.0 OBSERVATIONS

- Several steps were no longer applicable due to updated equipment.
- The procedure did not specify the technique for obtaining the air velocities.
- The procedure did not identify from which ducts to take air velocity measurements.
- The note prior to procedure step 7.7 incorrectly specifies that the individual velocity readings be within 20% of the average velocity.
- Dirty filter tests not being performed per ANSI N510-1980.
- No guidance given for operating the PRF in the recirculation mode.

Report section M3.1

CORRECTIVE ACTIONS

- IMPROVED PENETRATION ROOM BOUNDARY
- REVISED APPLICABLE SURVEILLANCE TEST PROCEDURES
- SUBMITTED A TS AMENDMENT REQUEST
- PERFORMED ADDITIONAL TESTING AND INSPECTIONS
- LABELED TEST PORTS