U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-341/88014(DRP)

Docket No. 50-341 License No. NPF-43

Licensee: Detroit Edison Company
2000 Second Avenue
Detroit, MI 48226

Facility Name: Fermi 2

Inspection At: Fermi Site, Newport, Michigan

Inspection Conducted: January 17, 1988 through April 28, 1988

Inspector: W. G. Rogers

Approved By: R. W. Cooper, Chief
Projects Section 3B

RC Knop for

5-12-88
Date

Inspection Summary

Inspection on January 17, 1988 to April 28, 1988 (Report No. 50-341/88014(DRP))
Area Inspected: The circumstances and licensee actions surrounding the failure of a Noninterruptible Control Air compressor on January 14, 1988.
Results: One violation was identified (Paragraph 5). One open item was identified (Paragraph 5).

DETAILS

1. Persons Contacted

a. Detroit Edison Company

F. Abramson, Operations Engineer
*P. Anthony, Licensing
#*S. Catcla, Vice President, Nuclear Engineering and Services
*D. Gipson, Plant Manager
#*L. Goodman, Licensing Supervisor
*R. Lenart, General Director, Nuclear Engineering
#*W. Orser, Vice President, Nuclear Operations/Plant Manager
R. Tassell, Engineer
#L. Fron, Supervisor, Mechanical and Fluid Systems
E. Wilds, Engineer
#L. Wooden, Supervisor, I&C Engineering
#B. Sylvia, Group Vice-President
#P. Marquardt, General Attorney
*W. Tucker, Superintendent, Operations

b. U. S. Nuclear Regulatory Commission

*M. Parker, Resident Inspector
#*W. Rogers, Senior Resident Inspector
#R. Cooper, Chief, Projects Section 3B
#C. Anderson, Enforcement Specialist
#H. Wong, Senior Enforcement Specialist
#P. Pelke, Project Inspector
#R. Knop, Chief, Projects Branch 3
#M. Virgilio, Deputy Director, DRP
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#C. Paperiello, Deputy Regional Administratnr

*Denotes those personnel who attended the exit on March 30, 1988.

#Denotes those personnel who attended the Enforcement Conference on April 28, 1988

2. Background on Systems Involved

a. Compressed Air System - Updated Final Safety Analysis Report (UFSAR) Sections 9.3.1 and 7.6.1.17 discuss the compressed air system. The system description and operating modes provided below were derived from those UFSAR sections.

1. System Description

The air system is composed of two subsystems. The first is the station air subsystem. The second is the control air subsystem.

The station air subsystem (SAS) consists of three one-half-capacity 1225 scfm, two-stage nonlubricated reciprocating compressors equipped with inlet filter-silencers, and intercoolers and aftercoolers. Two 150 cubic foot capacity air receivers and the station air distribution piping, valves, and fittings complete the station air equipment. The station air subsystem is nonsafety-related.

The control air distribution subsystem is divided into two distinct parts: interruptible and noninterruptible.

The noninterruptible control air (NIAS) portion of the subsystem consists of two 100% capacity 100 scfm, single-stage nonlubricated reciprocating air compressors; two 100% capacity parallel strings of oil filters, air dryers, and afterfilters; two control air receivers; and associated piping, fittings, and valves. The noninterruptible control air is supplied through these two separate distribution systems (Division I and Division II) to the standby gas treatment system (SGTS), control center emergency filtration system (CCHVAC), main steam isolation valve leakage control system (MSIVLCS) and numerous other engineering safety features (ESF) systems. The noninterruptible control air portion of the control air subsystem is safety-related.

The interruptible control air (IAS) portion of the subsystem consists of a afterfilter; air dryer; air receiver; and associated piping, fittings, and valves. This portion of the subsystem is nonsafety-related.

2. Normal Operation

Normal Operation of the compressed air system is by air from the turbine building being drawn into one of the three SAS compressors. Air is compressed, cooled and discharged into the SAS receivers at 100 psig. The air is distributed to the SAS users through a header/riser system from the SAS receivers.

Air from the SAS subsystem is the source of air for the control air subsystem by connections to the SAS header.

Compressed air from the station air system is supplied through one of these connections to the Division I and II noninterruptible control air compressor discharge headers. The air then flows from each header through its divisional 100% capacity filter and dryer where it is cleaned of all particles of dirt and dried by a regenerative desiccant-type dryer. After leaving the filter/dryer, the noninterruptible control air flows to its point of use through its divisional noninterruptible control air distribution system.

Another SAS connection supplies the IAS. The air passes through the filter/dryer to the air receiver and then flows to its point of use through the IAS air distribution system.

3. Emergency Operation

On loss of offsite power, the SAS compressors lose electric power. The NIAS is isolated from the SAS by isolation valves sensing the low pressure in the SAS header. The control air compressors (CACs) are automatically started with power supplied from the emergency diesel generators. Enough receiver capacity is provided to supply 10 minutes of noninterruptible control air to allow sufficient time for the emergency diesel generators to supply power to the CACs and sufficient time for the CACs to pickup and carry the load. With normal offsite power available, the CACs start immediately on low SAS header pressure.

b. Main Steam Isolation Valve Leakage Control System (MSIVLCS) - UFSAR Section 6.2.6 discusses the MSIVLCS. The system description and operating modes were derived from that document.

1. The MSIVLCS consists of two redundant air-injection subsystems. Division I consists of the necessary piping and valving to permit injection of Division I control air into the above-seat drain on the four outboard MSIVs. This allows pressurization of the piping volume bounded by the four pairs of inboard and outboard MSIVs. Division II consists of the necessary piping and valving to permit injection of Division II control air into the main steam drain line upstream of the third MSIVs. This allows pressurization of the piping volume bounded by the four pairs of outboard MSIVs and a third set of motor-operated MSIVs.

2. During normal operation the system is not in use. The system is manually initiated approximately 20 minutes after the LOCA, when reactor pressure falls below 44 psig and the steam line pressure is less than 150 psig. Both divisions will pressurize their respective piping volumes to 2 to 6 psi above the reactor pressure. The system will continue to maintain this 2 to 6 psi difference above reactor pressure thus providing a positive sealing medium against the release of radioactivity from MSIV leakage.

c. Control Center Emergency Filtration System (CCHVAC) - UFSAR Section 9.4.1 discusses the CCHVAC. The system description and operating modes were derived from that document.

1. The CCHVAC consists of two 100% capacity air-conditioned supply units, an air distribution system, and an emergency filtration system. The control center is heated, cooled, and pressurized by a recirculating air system. CCHVAC processes control center

air and makeup air through charcoal filters. Air at 1800 cfm passes through two separate emergency air intakes to an emergency makeup air filter train. The filter train consists of a mist eliminator, two heaters, HEPA filter, charcoal filter and another HEPA filter. The emergency intake flow is then combined with 1200 cfm of control center recirculation airflow. This airflow is then processed through the recirculation air filter train. The emergency recirculation filter train consists of a prefilter, HEPA filter, charcoal filter and another HEPA filter. The air is drawn through these emergency filters by one of two redundant emergency recirculation air fans. Two redundant chilled water units are used to keep the air cool.

2. The system is automatically initiated by select loss of coolant signals. Upon initiation the proper damper/fan configuration is established to support this recirculation mode.

d. Standby Gas Treatment System (SGTS) - UFSAR Section 6.2.3 discusses the SGTS. The system description and operating modes were derived from that document.

1. The SGTS provides sufficient iodine removal capability following a loss of coolant accident. This capability is accomplished by pressurization of the secordary containment preventing direct communication of contaminated air with the environment and filtration of contaminated air. The system consists of two separate and parallel 100% capacity trains. Ductwork allows for venting and purging of both the primary and the secondary containment atmospheres. In addition to the necessary ducts, controls, instrumentation, isolation valves, and protection systems each train consists of a moisture separator to remove entrained water droplets, a prefilter, electric heater, HEPA filter, deep-bed absorber unit, another HEPA filter, exhaust fan and a cooling air fan.

2. The system is automatically initiated on select loss of coolant signals. Upon initiation the proper fan/damper alignment is established to pressurize secondary containment.

3. Event Description

On January 14, 1988, the Division II NIAS control air compressor (CAC) failed during a periodic test. The licensee placed the CAC out of service, opened the crosstie valve to the Division I NIAS and initiated a work request.

On January 17, 1988, the Nuclear Shift Supervisor (NSS) instructed that Out of Specification Log (OSL) entry 88-060 be made on the out of service CAC. The OSL is the mechanism used by the licensee to determine the status of safety-related equipment required to be operable to satisfy Technical Specifications (TS) Limiting Conditions for Operations (LCO), thus ensuring that TS action statements are appropriately performed. The licensee utilizes a special type of OSL entry entitled a "tracking"

OSL entry. This "tracking" entry provides status on equipment that may invoke a TS action statement should other equipment be rendered inoperable. The January 17th OSL entry was a "tracking" type OSL. The entry was used to highlight the failed CAC increasing the management emphasis on its repair and return to service. The NSS did not consider the CAC required by TS and no action times were specified.

That same day the inspector noted the CAC to be out of service and questioned whether a TS system was affected by this equipment loss and a TS LCO action statement was in effect. The inspector informed the then Engineering Vice President of this concern.

On January 19, 1988, Deviation Event Report (DER) 88041 was written by engineering personnel on the impact of CAC failure as it relates to TS LCOs. The DER was dispositioned by engineering personnel on January 22. That disposition stated that since the three non-safety related station air compressors were operable, the Division I NIAS air compressor was operable and the cross-tie between NIAS Division I and NIAS Division II was open the Technical Specification associated systems would continue to receive the required control air necessary for safe plant shutdown. The DER disposition also stated that entrance into a 30 day LCO action statement was reasonable and prudent. The disposition did not state that a 30 day LCO action was required.

On January 24, 1988, OSL 88-060 was modified to identify a 30 day LCO action statement to be in affect from the date of CAC loss, January 14, 1988. The OSL entry did not specify the applicable TS which was requiring the 30 day LCO action and no actions were ever prescribed to be taken at the end of the 30 days. However, the licensee indicated that actions were being formulated to be taken at the end of the 30 days.

On February 3, 1988, the CAC was returned to service and OSL 88-060 was cleared. The unit was in Mode 1 during the whole period the CAC was out of service.

4. Inspector Followup

After questioning whether the CAC was a support system for TS systems the inspector began pursuing an answer to the question. Preliminary response to the question by licensed personnel was the CAC was not required.

The inspector reviewed the design specification for NIAS, drawings, design analysis of NIAS by Stone and Webster, design calculations for NIAS, Updated Final Safety Analysis Report (UFSAR) Section 9.3.1 and UFSAR Section 7.6.1.17. From reviewing these documents, all of which were active design basis documents, there were some discrepancies. These discrepancies were:

- The actual NIAS air users varied between the Stone and Webster analysis and the design specification.

- UFSAR Section 9.3.1.2 identified the reason for the crosstie between the IAS and NIAS to be for use during a NIAS Division II supply maintenance outage. The design specification Section 5 identified the reason as under circumstances where the station air system fails and the NIAS compressors start operation, plant personnel could remotely open the isolation valve provided the NIAS operation was not jeopardized.

After reviewing these design documents the inspector selected three air users that appeared to need the NIAS to perform their safety function. These systems were the main steam isolation valve leakage control system (MSIVLCS), standby gas treatment system (SGTS), and control center emergency filtration system (CCHVAC).

a. MSIVLCS Design Basis

The design and regulatory documents reviewed for MSIVLCS were:

- Design Specification 3071-530
- Regulatory Guide 1.96 Revision 1, Design of Main Steam Isolation Valve Leakage Control Systems for Boiling Water Reactor Nuclear Power Plants
- UFSAR Section 6.2.6
- UFSAR Appendix A, Conformance with Regulatory Guides
- TS 3.6.1.4
- TS 3.6.1.2
- Design Calculation 13067.13-P-B21-06-002.

The most salient sections of these documents were:

- Regulatory Guide 1.96, Revision 1, Section C.1. requires, in part, "The leakage control system and any necessary subsystems, including the source of any sealing fluid if a fluid seal type is used, should be designed in accordance with Seismic Category I and Quality Group B requirements..."
- Regulatory Guide 1.96, Revision 1, Section C.2. requires, in part, "The leakage control system (and any necessary subsystems) should be capable of performing its safety function, when necessary, considering effects resulting from a LOCA..."
- Regulatory Guide 1.96, Revision 1, Section C.3. states, "The leakage control system should be capable of performing its safety function following a LOCA and assumed single active failure (including failure of any one of the main steam isolation valves to close)."

- Regulatory Guide 1.96, Revision 1, Section C.5. states, "The leakage control system should be capable of performing its safety function following a loss of all offsite power coincident with a postulated design-basis LOCA."

- Regulatory Guide 1.96, Revision 1, Section C.6. states, "The leakage control system should be designed with sufficient capacity to control leakage from the main steam lines for as long as postulated accident conditions require containment integrity to be maintained."

- Appendix A of the UFSAR documents the licensee commitment to Regulatory Guide 1.96, Revision 1 with the exception of Section C.12 which is not applicable to the matters being addressed in this report.

- UFSAR Section 6.2.6.3 identifies single-failure criteria being accounted for in the design of the MSIVLCS by the seismic qualification of the main steam lines, the installation of a third MSIV in each main steam line, and the redundancy of active components and air sources.

- UFSAR Section 6.2.6.2 identifies MSIVLCS using two redundant air-injection systems: Divisions I and II. Division I MSIVLCS obtains air from the Division I control air system. Division II MSIVLCS obtains air from the Division II control air system. These divisions would be manually activated 20 minutes after a postulated LOCA.

- TS 3.6.1.4 requires two independent MSIV leakage control system subsystems to be operable with specific remedial action to be taken when a subsystem is inoperable.

- UFSAR Section 6.2.6.3 states in part "Gross MSIV leakage would not result in a degradation of the positive-seal MSIVLCS. Gross leakages on the order of 1000 scfh are well within the capacity of the Category I control air system, which is the source of air for the MSIVLCS. The maximum injection rate of air through the MSIVLCS to the main steam piping is limited to 50 scfm..."

- TS 3.6.1.2.c establishes the maximum acceptable leakages rates to be less than or equal to 100 scfh for all four main steam lines when tested at 25 psig.

- Design Specification 3071-530 Sections 7.3.1 and 7.3.2 identify MSIVLCS to be subject to a design bases accident of 180 days.

- The design calculation 13067.13-P-B21-06-002 determined that 126 minutes would be needed to pressurize the Division II piping and 20 minutes for the Division I piping at a fill rate of 25 scfm.

Upon completion of this design review the inspector determined that each division of MSIVLCS must be capable of performing its safety function even with a leak of 100 scfh present for 180 days following the LOCA. With a leak of this magnitude in either division of the MSIVLCS both NIAS air receiver tanks (341 cubic feet volume each) would be depleted long before the end of the first day following the LOCA. To maintain MSIVLCS capable of performing its safety function requires a CAC to be operable. To meet the requirement of being able to perform its safety function with a single active failure present requires two divisions of MSIVLCS with two air sources, i.e., two CACs. Also the air usage for the MSIVLCS stated in the Stone and Webster analysis was not consistent with the steam line initial pressurization usage used in design calculation 13067.13-P-B21-06-002.

b) CCHVAC and SGTS Design Basis

The design basis and regulatory documents reviewed were:

- Applicable Functional Operating Sketches
- Applicable P&IDs
- Detailed component drawings
- Regulatory Guide 1.52, Revision 2; Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants
- UFSAR Appendix A
- UFSAR Section 6.2.3
- UFSAR Section 9.4.1
- TS 3.6.5.3
- TS 3.7.2

The most salient sections of these documents were:

- Regulatory Guide 1.52, Rev. 2, Section C.2.a states in part "ESF atmosphere cleanup systems designed and installed for the purpose of mitigating accident doses should be redundant."
- Regulatory Guide 1.52, Rev. 2, Section C.2.h requires all instrumentation and equipment controls be designed to IEEE Standard 279 and Section 4.7 of IEEE Standard 279 requires protection against single failure.

- UFSAR Appendix A documents the licensee's commitment to Regulatory Guide 1.52 stating that the CCHVAC active components (fans, dampers, controls, etc.) are redundant and meet IEEE 279.

- UFSAR Section 9.4.1.1.d states for the CCHVAC, "Redundant components are powered by their corresponding redundant Division I and Division II engineered safety feature buses."

- UFSAR Section 9.4.1.1.e states for the CCHVAC, "The system is designed to accomplish its design objectives assuming a single active component failure."

- TS 3.7.2 requires the control room emergency filtration system to be operable and requires specific remedial action be taken when a required redundant component is inoperable.

- Dampers T41-F69B, 38, 31B, 61B, 56B, 56A, 54, 40B, 34B, 34D, 47 48, 66 and 67 do not fail to their safety function position for CCHVAC recirculation upon loss of air pressure. There are no accumulators or reservoirs for these dampers.

- UFSAR Section 6.2.3.2 states, in part, "The SGTS is a 100%-redundant ESF system..." and "...consists of two separate and parallel 100% capacity trains."

- UFSAR Section 6.2.3.3.1 states, in part, "All power and control circuits meet the requirements of IEEE 279. Redundant active components are provided where necessary to ensure that a single failure does not impair or prevent system operation."

- TS 3.6.5.3 requires two independent standby gas treatment subsystems to be operable.

- Dampers T46-F01A, 01B, 02B, 02A, 03A, 03B, 04A, 04B, 05A, 05B, 07A, 07B, 08A ,08B, 406, 407, 408 and 409 do not fail to their safety function position upon loss of air pressure. There are no accumulators or reservoirs for these dampers.

It was apparent from these document reviews that air pressure is required to place necessary SGTS and CCHVAC dampers in the safety function position, without which the systems are inoperable. The air pressure for these systems must be from NIAS. Since these systems are required to be redundant, two divisions of NIAS including CACs are necessary to support these systems. Without CACs the MSIVLCS usage depletes the air receivers and the SGTS/CCHVAC dampers fail closed rendering the CCHVAC and SGTS incapable of passing air flow.

The inspector presented the review of the NIAS/SGTS/CCHVAC/MSIVLCS information to the licensee engineering staff who agreed with the inspector's conclusion that CACs are necessary to support MSIVLCS, SGTS and CCHVAC system performance. However, the licensee contended that no

LCO action statement is invoked when a CAC is out of service. The rationale for this statement was based on the engineering staff's interpretation of a statement in Section 9.2.1.2 of the UFSAR. The statement is "There is a normally closed intertie between the Divisions I and II noninterruptible control air systems." During a maintenance outage of the supply to one of these divisions, the intertie is opened so that the division having the outage can be supplied by the other division. The licensee believed that the statement in the UFSAR gave authorization to remove a CAC from service for maintenance for an indeterminate period of time and this condition was a part of the original design basis of the system. Additionally, the engineering staff considered one CAC to have adequate capacity for both divisions of air users.

The inspector informed the licensee that this philosophy was not consistent with the regulatory requirements and began pursuing whether this philosophy had manifested itself in other areas of the licensee organization.

a) Current Training Review - The inspector reviewed the current operator, licensed and non-licensed, training lesson guides on CCHVAC and the compressed air system and ascertained:

   - The CCHVAC training guides state that control air supplies air operators for dampers under the "Interrelationships with Other Plant Systems" section.

   - The compressed air training guide states in the Technical Specifications section "The station and control air system is not specifically mentioned in Technical Specifications, however, many systems which are mentioned in Tech. Specs. do require control air system operability to be considered operable."

   - The compressed air training guide does not explicitly state those systems rendered inoperable by loss of control air.

b) DER Review - The inspector reviewed past deviation reports (DERs) associated with the control air system and ascertained:

   - DER 85-0667 discussed a situation where the Division I/II intertie and the NIAS/IAS intertie were used simultaneously. The DER disposition related to the UFSAR sections on the interties and concluded that this situation was not a design deficiency.

   - DER 87-0322 discussed a postulated feedwater line break which would render the three nonsafety-related station air compressors out of service by the high energy fluid and the two NIAS compressors out of service through flooding of their respective rooms. The licensee analyzed this condition assuming the plant was in Mode 1 at initiation of the event. The conclusion was that safe shutdown could be achieved. However, the conclusion was based on manual repositioning of CCHVAC dampers and that the

SGTS was not required. The DER further states "Loss of control air and loss of feedwater are part of UFSAR Chapter 15 analysis. In addition, FW line break with subsequent loss of control air effect evaluation was performed. The evaluation shows that for the FW line break with loss of control air, safe shutdown can be achieved."

- Engineering staff personnel were a party to the disposition of DER 87-0322 and DER 85-0667.

With regard to DER 85-0667 the inspector pursued the use of both interties simultaneously with the engineering staff. After questioning the engineering staff, they stated that this configuration was outside the design basis. The inspector reviewed the procedures to determine whether this was expressly forbidden in the procedures. The procedures did not forbid such actions.

With regard to DER 87-0322 the two assumptions are invalid in that manual repositioning of the CCHVAC dampers from outside the control room is outside the design basis for CCHVAC and the SGTS would receive an automatic initiation signal (including damper positioning) at a reactor vessel level 2 signal. The conclusion is not correct given the invalidation of the two assumptions in the analysis.

c) Operator Interviews - The inspector discussed the NIAS with a large number of senior reactor operators. Those interview results were:

- The licensed individuals stated that they had not been trained or directed to consider the NIAS as a Technical Specification support system.

- Loss of a CAC did not invoke any LCO action statements.

- Use of the interties was acceptable.

d) Independent Safety Evaluation Group (ISEG) Reviews - In 1987 as a response to a Notice of Violation, the licensee committed to have ISEG review the testing of select safety related systems. One of these systems was compressed air. The inspector reviewed that report and concluded that the deficiencies identified in this inspection report were outside the scope of the ISEG review.

e) Procedure Content - The inspector reviewed system operating Procedure 23.129, Station and Control Air System. Section 1.1 states, in part, "The NIAS is provided to be interconnected, should one divisional supply be lost."

It was apparent from these five reviews that the engineering interpretation regarding NIAS had been adopted by the production organization.

Finally, the inspector requested to review the calculations supporting single CAC operation feeding both user divisions of NIAS. The licensee was unable to provide any calculations of this nature. The inspector requested this calculation be performed to determine if by opening the crosstie the MSIVLCS, SGTS and CCHVAC systems would perform their safety functions or the control air demand would be greater than the safety related air sources (two air receivers and one CAC) could provide. The calculation was performed and completed in late April as design calculation 4931. The calculation supported the licensee's position.

5. Conclusion

Upon completion of this inspection the inspector concluded that:

a. 10 CFR 50.36(c)(2) states that Technical Specification Limiting Conditions for Operation are "the lowest functional capabilities or performance levels of equipment required for safe operation of the facility." Technical Specifications Limiting Conditions for Operation 3.6.5.3, 3.7.2 and 3.6.1.4 require two redundant operable subsystems for standby gas treatment, control center emergency filtration (active components only) and main steam isolation valve leakage control. The intent behind the necessity for two subsystems is to assure that a single active failure does not render the systems incapable of performing their safety functions.

10 CFR 50.36(c)(2) further states, "When a LCO of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met." If these systems are not capable of performing their safety function with a single failure present then their respective LCO action statements must be invoked since the LCO requiring two redundant subsystems is not met.

The NIAS is a TS support system as defined be TS 1.25 which states, "A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified functions and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s)."

During the time the CAC was out of service the licensee did not enter into the LCO action statements of Technical Specification 3.6.5.3, 3.7.2 or 3.6.1.4. With the Division II CAC out of service these systems will not perform their safety function if a single failure were to occur to the Division I CAC, the EDG which supplies power to the Division I CAC or an abnormal air demand on the NIAS system. The CCHVAC and SBGT LCO action statements allow operation for up the 7 days before unit shutdown must commence. The MSIVLCS LCO action statement allows operation for up to 30 days before unit shutdown must commence.

On January 21, 1988, when the 7 day LCO expired the licensee failed to place the unit in Hot Shutdown by 2215 on January 21, 1988, and Cold Shutdown by 2215 on January 22, 1988. This is considered a violation (50-341/88014-01(DRP)) of Technical Specifications 3.6.5.3 and 3.7.2.

The root cause of this violation was the inadequate understanding of the underlying design bases for the NIAS as it supports the operability of Technical Specification systems by the engineering organization. It appears that the engineering organization has not provided the appropriate direction to the rest of the Fermi 2 organization. Therefore, the training personnel have not told the operators of the direct operability tie between NIAS and SBGT/CCHVAC/MSIVLCS and the procedure writers have not provided that guidance in the operating procedures.

b. The design basis documents associated with the NIAS have not been kept current and provide inconsistent information on the NIAS. Reconciliation of the documents is considered an open item (50-341/88014-02(DRP)).

The root cause of this matter was a lack of coordination between the engineers associated with the NIAS and the engineers associated with the NIAS air users. Each thought the other was providing the necessary information in their respective categories.

c. Guidance should be provided to the operating shifts forbidding operation of both compressed air interties simultaneously.

6. Exit Interview (30703)

The inspectors met with licensee representatives (denoted in Paragraph 1) and informally throughout the inspection period and summarized the scope and findings of the inspection activities. The inspectors also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspectors during the inspection. The licensee did not identify any such documents/processes as proprietary. The licensee acknowledged the findings of the inspection. However, the licensee management supported the licensee engineering staff in that management considered that no violation of TS LCOs had occurred and the DER 88041 disposition was proper.

7. Enforcement Conference

On April 28, 1988, an enforcement conference was held on the NIAS CAC situation and design deficiencies of the primary containment monitoring system (PCMS) discussed in Inspection Report 50-341/87048(DRP).

With respect to the NIAS portion of the conference the licensee restated their position that a LCO action statement had not been involved with a NIAS CAC out of service. The inspector restated his conclusions as to why a LCO was applicable.

New information provided at the conference was:

- The licensee is considering a TS change explicit for NIAS .
- The licensee performed a probabilistic risk assessment of the ramifications of having the intertie open and closed with one CAC in service.
- PCMS operability is also affected in the same manner as SGTS/CCHVAC/MSIVLCS upon loss of control air.