

ENCLOSURE

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

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License Nos.: NPF-10
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Report No.: 50-361/96-17
50-362/96-17

Licensee: Southern California Edison Co.

Facility: San Onofre Nuclear Generating Station, Units 2 and 3

Location: 5000 S. Pacific Coast Hwy.
San Clemente, California

Dates: November 18-22, 1996

Inspectors: M. F. Runyan, Reactor Inspector
M. B. Fields, Project Manager
J. J. Russell, Resident Inspector

Approved By: C. A. VanDenburgh, Chief, Engineering Branch
Division of Reactor Safety

Attachment: Supplemental Information

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
Report Details	5
III. Engineering	5
E1 Conduct of Engineering	5
E1.1 Reactor Head Vent Line Loss of Coolant Accident Limiter Orifice Valve S31201MU995 Normally Locked Closed, Found Open - Unit 3	5
E.8 Miscellaneous Engineering Issues	10
E8.1 (Open) Inspection Followup Item 50-361;362/9526-02: Failure to Perform 10 CFR 50.59 Evaluation	10
E8.2 (Closed) Licensee Event Report 95-04: Inoperable Fire Control System	12
E8.3 (Closed) Inspection Followup Item 50-361;362/9526-03: Licensee Event Report 50-361;362/95-16): Heating, Ventilation, and Air Conditioning/High Energy Line Break Interactions	13
V. Management Meetings	15
X1 Exit Meeting Summary	15

EXECUTIVE SUMMARY

San Onofre Nuclear Generating Station, Units 2 and 3
NRC Inspection Report 50-361/96-17; 50-362/96-17

Engineering

- The failure to properly align orifice gate valve 3MU995 in the reactor coolant gas vent system prior to Unit 3 refueling outage startup in September 1995 was identified as a violation of Technical Specification 6.8.1 (Section E1.1).
- During the period of time that Unit 3 was operated with valve 3MU995 improperly open (September 1995 to September 1996), the probability of a small break loss of coolant accident was slightly increased. However, the reactor coolant gas vent system remained capable of performing its design function. Consequently, the safety significance of the mispositioning was low (Section E1.1).
- The mispositioning of valve 3MU995 revealed a weakness in the licensee's locked valve program, where a single procedural error resulted in the failure to properly align a valve important to safety. The licensee had initiated corrective actions that should correct this weakness (Section E1.1).
- Upon discovery of the mispositioning of valve 3MU995, the licensee did not perform a comprehensive review of documented valve lineups to ensure that no other similar valve mispositionings had occurred. The licensee performed this review at the inspectors' request. The inspectors considered the licensee's initial response, which included only a check of one corresponding valve lineup in Unit 2, to be weak (Section E1.1).
- The inspectors considered Licensee Controlled Specification 3.4.102, which addresses component configuration, test, and surveillance requirements for the reactor coolant gas vent system, to be weak in not addressing the position sensitivity of valve 3MU995 (and 2MU995) (Section E1.1).
- The licensee missed an opportunity to earlier identify the mispositioning of valve 3MU995 from valve lineup information that was available during the entire year the valve was mispositioned (Section E1.1).
- A previous violation concerning valve 3MU995 was reviewed but left open because the licensee had not adequately updated the Updated Final Safety Analysis Report to describe the actual configuration of the reactor coolant gas vent system and had not addressed a weakness (identified by the NRC at the time the violation was issued) in the 10 CFR 50.59 screening process that appeared to be a contributing cause to the violation (Section E8.1).

- Licensee efforts to identify and correct a high energy line break interaction through ventilation ductwork to other spaces housing environmentally sensitive equipment was indicative of strong, proactive engineering (Section E8.3).

Report Details

Summary of Plant Status

Unit 2 and Unit 3 were operated at 100 power during the inspection.

III. Engineering

E1 Conduct of Engineering

E1.1 Reactor Head Vent Line Loss of Coolant Accident Limiter Orifice Valve S31201MU995 Normally Locked Closed, Found Open - Unit 3 (37550)

a. Inspection Scope

On September 27, 1996, during preparations for draining the Unit 3 reactor coolant system to midloop, the licensee discovered that valve S31201MU995 (3MU995) was open. This valve, a manual orifice gate valve located in the reactor coolant vent gas system, is designed to limit the flow rate during reactor head venting operations to less than the capacity of a single charging pump. An orifice is drilled into the seat of the valve, such that when the valve is closed, a flow diameter of 0.18 inches is provided. When the valve is open, a larger 0.62-inch diameter opening is provided. This valve was required by procedure to be locked closed during Modes 1 through 4. The valve had been open since the last refueling outage in September 1995. Thus, the plant was operated with valve 3MU995 out of its normal position for approximately 1 year.

The inspectors reviewed the circumstances involved in the mispositioning of valve MU995 and the safety significance of the valve being left open for 1 year of reactor operations.

In addition, the inspectors reviewed a previous violation concerning valve 3MU995 (361;362/9526-02). This violation identified the licensee's failure to perform a safety evaluation in accordance with 10 CFR 50.59 or to update the final safety analysis report during installation of a field change that replaced an orifice plate originally installed in the gas vent system with valve 3MU995 (an identical change was made to Unit 2).

b. Observations and Findings

Failure to Follow Procedure

The inspectors interviewed operators and operations' supervision, reviewed copies of Procedure SO23-3-1.4, Attachment 3, Temporary Change Notices 15-1 and 15-2, "RCS Post Fill Valve Alignment;" NRC Inspection Report 50-361;362/95-26 with licensee responses; Updated Final Safety Analysis Report Section 9.3.7; Licensee Controlled Specification 3.4.102; and NUREG 0737, "Clarification of TMI Action Plan Requirements." The inspectors also reviewed Procedure SO23-0-17, Temporary Change Notice 10-41, "Locking of Safety-Related Valves and Breakers," and reactor coolant system Piping and Instrumentation Drawing 40111. The inspector also reviewed a briefing paper submitted by the licensee on November 18, 1996, and Licensee Event Report 50-362/96-005, "Reactor Head Vent Valve Mispositioned."

During the Unit 3 Cycle 8 refueling outage in September 1995, following core reload, the reactor coolant system had been filled solid, then drained to approximately 50 percent pressurizer level for integrated leak rate testing and integrated engineered safety features testing. At that time, the licensee entered reactor coolant system fill Procedure SO23-3-1.4, Temporary Change Notice 15-2, Procedure Modification Permit 1, "Filling and Venting the RCS." Attachment 3 of this procedure included a check that valve 3MU995 was locked closed. During the fill and vent, this valve is normally opened to expedite the evolution, then closed upon completion of the evolution. However, because vent rigs were to remain attached to the reactor coolant system, the procedure was modified to temporarily defer Attachment 3 and, thus, to permit, among other changes, valve 3MU995 to remain open. The procedure modification permit process was used, which included final approval by the operations manager. The attachment, if performed, checked reactor coolant system vents closed. The reactor coolant system was then taken solid a second time and a bubble was drawn. The second time the fill procedure was used a different senior reactor operator initiated Attachment 3, but wrote "N/A" for various valves in the attachment that he thought would have been checked by the previous performance of the attachment. Those checks had been deferred as explained above, and had not been performed.

During an outage in September 1996, valve 3MU995 was found in an open position during routine work. The licensee immediately verified that Attachment 3 had been performed for Unit 2, and, thus, had confidence that valve 2MU995 (same valve in Unit 2) was in the required closed position. The operations manager stated that the only valve found out of position was valve 3MU995, as the other vent valves in the attachment had been positioned correctly when the vent rigs were removed in accordance with the procedure for removing the individual vent rigs.

The alignment performance guidelines for Procedure SO23-3-1.4, Attachment 3, Temporary Change Notice 15-2, "RCS Post Fill Valve Alignment," allowed for unbracketed steps, including the check of valve 3MU995, to be omitted if verification was made that they had been performed during a previous fill. The inspectors interviewed the senior reactor operator who directed that the unbracketed steps not be performed. He stated that he could not remember what he had checked for verification. The inspector considered this a violation of the alignment performance guidelines of this procedure, since the procedure directed bracketed steps to be performed, unless they were verified as having been previously completed. Specifically, the alignment performance guidelines listed below Step 1.3, Attachment 3, Temporary Change Notice 15-2, stated, "All unbracketed steps will be performed now . . . unbracketed steps may be marked N/A after verifying completion during the previous fill." The senior reactor operator had marked "N/A" but had not verified completion of this step during the previous fill.

Technical Specification 6.8.1, in effect in September 1995, required that written procedures be established, implemented, and maintained covering activities recommended in Regulatory Guide 1.33, Revision 2, Appendix A.

Procedure SO 23-3-1.4 was included in the scope of this regulatory guide. The failure to correctly follow Procedure SO23-3-1.4 was identified as a violation (violation 50-361;362/9617-01). This violation, though generally meeting the criteria for a noncited violation, has been cited for the following two reasons:

- (1) The licensee missed an opportunity to earlier identify the mispositioning of valve 3MU995. Valve lineup information was available indicating the mispositioned status of this valve for the entire year it was mispositioned.
- (2) The licensee did not perform an immediate generic review of locked valve program valve lineups to ascertain whether other valves may have been similarly mispositioned (only the corresponding Unit 2 valve was checked). This is discussed in greater depth under "Programmatic Weakness" below.

Safety Consequences

The licensee had installed valve 3MU995, an orifice disc gate valve, during the Cycle 8 refueling outage in September 1995. Previously an orifice plate had been in this position. The orifice plate and the closed orifice gate valve both limited the vent flow rate to the capacity of a single charging pump. With the orifice gate valve open, the flow rate would have exceeded the entire normal charging capacity. As a consequence of this fact, operating Unit 3 with valve 3MU995 open effectively added approximately 171 feet of ASME Class II piping to the reactor coolant system pressure boundary. In accordance with the Updated Final Safety Analysis Report, Section 3.2 (the Q-List), the reactor coolant system was required to be Class I piping. The piping downstream of valve 3MU995 was rated for reactor coolant system pressure and temperature, and was normally pressurized to

2250 psia because of the presence of the orifice. The valve, when closed, had provided a code break between these two classes of piping, because it was sized to limit flow to the capacity of one charging pump. Consequently, a break downstream of the valve would have resulted in a leak and not a loss-of-coolant accident, regardless of the size of the break. With the valve open, the 0.18 square-inch orifice diameter was replaced with a 0.62 square-inch opening. At 2250 psia, a 0.62 square-inch opening would have allowed flow greater than the capacity of three charging pumps, but still within the total makeup capacity of the emergency core cooling system pumps. The resulting small break loss-of-coolant accident would have been bounded by the existing small break analysis.

The head vent system was constructed to Section III of the 1974 ASME code, with Schedule 160 376 stainless steel. The licensee informed the inspectors that the only difference for Class I and II system piping less than 1 inch, in terms of allowable materials, fabrication, design, construction, and testing, as the 1974 code, was that the welds for Class I piping were both radiographed and dye-penetrant tested as postweld-required nondestructive examination, while the welds for Class II systems were only radiographed. The inspectors found that because approximately 171 feet of piping had been added to the reactor coolant system pressure boundary, and because this piping was not as completely examined as the Class I piping already in place, the probability of a small break loss-of-coolant accident had increased. However, the inspectors also found that, while certain surface defects may only be detected by surface examination depending on their orientation to the radiographic beam, radiography still provided a reasonable assurance that significant defects in the weld would have been detected. The inspectors determined that the increase in the probability of a small break loss-of-coolant accident was low, because the additional piping was constructed and designed to Class I standards and was normally pressurized to reactor coolant system pressure.

The inspectors also determined that the reactor coolant gas vent system remained capable of performing its design function, despite the increased flow rate that would have been present without the flow restricting orifice in service. This observation was based on conversations with the licensee and a review of a hydraulic analysis performed by the licensee at the inspectors' request. The inspectors determined that the solenoid-operated valves, located downstream of the orificed valve and providing isolation from the pressurizer relief tank and containment atmosphere, were capable of opening and closing against the postulated differential pressures and flows. Based on information provided by the licensee, water hammer and stresses created by the additional flow rate were within acceptable tolerances for the system. The operators may have lost pressure control when the system was utilized, due to the pressure drop from the increased flow, but control would probably have been quickly recovered following the expected level recovery provided by the automatic response of the emergency core cooling system. By procedure, the operator response would have been to stop venting and regain subcooling in the reactor coolant system. Natural circulation may have been

momentarily lost, but would have been reestablished when venting was stopped. Based on the above facts, the inspectors determined that the reactor coolant gas vent system remained operable with valve 3MU995 in the open position.

Based on the above, the inspectors concluded that the safety consequence of operating Unit 3 with valve 3MU995 open was low. The probability of a small break loss-of-coolant accident increased slightly but the consequences were bounded by the current accident analysis. The reactor coolant gas vent system was still capable of performing its design function.

Programmatic Weakness

The licensee's corrective actions taken and planned to prevent recurrence of this incident consisted of immediately verifying that the Unit 2 valve 2MU995 was closed, generating a controlling document to stipulate procedure flow during outage recovery (reviewing integrated procedures and identifying where important decisions are made and should have management review), having a final systems alignment checklist of important valves prior to containment closeout (which will include valve MU995), reviewing the event with all operators, and appropriate disciplinary action.

In contrast to the licensee's assertion that multiple errors caused the mispositioning of valve 3MU995, the inspectors found that a single operator error caused this event. The error was the failure to follow the procedure cited above and discussed in the Notice of Violation. The inspectors noted that several other barriers had failed, but did not consider them as programmatically required. The operations manager stated that it was his expectation that the operators who used the procedure modification permit process (leaving valve 3MU995 open) for the original performance of the fill procedure should have communicated this change better, that the shift turnover process should have communicated this change, and that the reviewer of the procedure performance in which the valve was not closed should have determined that the "N/A" was inappropriate. While acknowledging that one or more of these could have prevented the mispositioning, the inspectors found that these expectations were not written into the procedure and, hence, did not represent clear programmatic requirements. Since the mispositioning had only one clear procedural barrier, the inspector questioned how the licensee was assured of the correct positioning of the remaining locked, safety-related valves in both units. The operations manager stated that a locked valve had not been found mispositioned in approximately 10 years. The inspectors acknowledged this, but also noted that no effort had been made to verify that similar decision points had been made correctly, accomplished by checking attachments performed at the end of the most recent outages for both units. The licensee acknowledged and responded to this concern. At the end of the inspection period, the licensee was in the process of verifying correct performance of the Unit 3 procedures performed during recovery from the most recent Unit 3 outage. Unit 2 was scheduled to enter a refueling outage approximately one week following the exit meeting, during

which the position of locked valves would be physically verified. The licensee prioritized the review of attachments on Unit 3 and did not have time before outage entry to perform a similar review on Unit 2.

The inspectors determined that the corrective actions proposed by the licensee, as discussed above, would most likely prevent recurrence of this event. These actions would appear to correct the weakness in the locked valve program that permitted valve 3MU995 to be mispositioned as a result of a single procedural error.

c. Conclusion

A violation was issued for failing to follow procedure. The safety consequence of leaving valve 3MU995 open was low, because the probability of a small break loss-of-coolant accident was only slightly increased, and because the reactor coolant gas vent system remained operable. However, the licensee's corrective actions were not thorough in that it did not immediately begin to verify other safety-related locked valves (other than the identical valve in Unit 2) were in the correct position, even though, in this instance, only one clear procedural error precipitated the valve mispositioning. (The inspectors recognized that the licensee continued to characterize the event as a multiple-error occurrence thereby, explaining, somewhat, the lack of more decisive action). The inspectors also noted that the licensee missed an opportunity to earlier identify the mispositioning event. In light of these concerns, the NRC determined that the violation, despite generally meeting the criteria for a noncited violation, should be cited.

E.8 Miscellaneous Engineering Issues (92903)

E8.1 (Open) Inspection Followup Item 50-361;362/9526-02: Failure to Perform 10 CFR 50.59 Evaluation

Background

The licensee replaced the reactor coolant gas vent system flow limiting orifice, described and depicted in the Updated Final Safety Analysis Report with an orifice gate valve (3MU995) without performing a 10 CFR 50.59 safety evaluation and without changing the Updated Final Safety Analysis Report. These two omissions resulted in a Severity Level IV violation. NRC Inspection Report 50-361;362/95-26 also identified a weakness in Procedure SO123-XXIV-10.21, "Field Change Notice and Field Interim Design Change Notice," Revision 5, regarding the lack of a written basis justifying whether a plant change required a 10 CFR 50.59 safety evaluation. The licensee responded to this violation by letter dated February 20, 1996, which provided the results of the 10 CFR 50.59 safety evaluation, and a commitment to update Updated Final Safety Analysis Report Figure 9.3-15 (reactor coolant gas vent system).

Followup

The inspectors reviewed the 10 CFR 50.59 evaluation and Updated Final Safety Analysis Report change for completeness and accuracy. In addition, the inspectors reviewed Procedure SO123-XXIV-10.21 to determine if the weakness identified in NRC Inspection Report 50-361;362/95-26 (discussed in the preceding paragraph) had been corrected.

The inspectors concluded that the 10 CFR 50.59 safety evaluation addressing the modification to the reactor coolant gas vent system was acceptable. The safety evaluation properly identified the systems and components affected by the change, the parameters of the accident analysis affected by the change, and the potential effects of system or component failure. The evaluation contained acceptable responses to each of the seven Nuclear Safety Analysis Center-125 questions designed to identify an unreviewed safety question, as defined by 10 CFR 50.59(a)(2). Sufficient detail was provided in the safety evaluation to allow an independent reviewer to conclude that the change did not result in an unreviewed safety question. The inspection team observed that the safety evaluation could have been stronger with regard to the administrative processes for controlling the position of the orifice valve. Because of the importance of the position of this valve, it would have been prudent to state clearly in the safety evaluation that the procedures to assure proper valve position needed to be highly reliable and single-failure proof.

The inspectors noted that the 10 CFR 50.59 safety evaluation included an assumption that valve 3MU995 (and 2MU995) would always be closed in accordance with the valve lineup procedures contained within the locked valve program. The licensee credited the independent verification of valve position provided within the locked valve program to conclude that two independent errors would have to occur for the valve to be left open. Therefore, postulating the valve being left open would have exceeded single failure analysis requirements. The inspectors concluded that the licensee was correct in their interpretation of the requirements and that the safety evaluation's exclusion of mispositioning was acceptable. As discussed in Section E1.1 above, the inspectors concluded (during this inspection) that a single procedural error in combination with several examples of poor practice had caused the mispositioning. However, the inspectors concluded that the originators of the 10 CFR 50.59 evaluation were justifiably unaware of this weakness in the locked valve program and that, based on information available at the time, the single error assumption made in the 10 CFR 50.59 evaluation was acceptable.

Regarding the Updated Final Safety Analysis Report update for the reactor coolant gas vent system, the inspectors concluded that while the change made to Figure 9.3-15 was accurate, the Updated Final Safety Analysis Report change was not complete. The orifice in this system is referred to in several places in Updated Final Safety Analysis Report Section 9.3.7. A complete Updated Final Safety

Analysis Report change would have modified Section 9.3.7 to make it clear that the reactor coolant gas vent system orifice was replaced with a gate valve that could act as a restricting orifice when closed, or could be opened to expedite filling and venting operations.

The inspectors reviewed the specification defining the operability of the reactor coolant gas vent system. The current location of this specification is Licensee Controlled Specification 3.4.102. This specification did not reference valve 3MU995. The inspection team observed that a more complete description of the vent system would include this valve, and its proper position, during Modes 1, 2, 3, and 4. As discussed in Section E1.1 of this report, the reactor coolant gas vent system could be considered operable with valve 3MU995 open, but its conformance to design is dependent on this valve being closed.

The inspectors reviewed Procedure SO123-XXIV-10.21 to determine if the weakness identified in NRC Inspection Report 50-361;362/95-26 had been corrected by the licensee. The inspectors concluded that no changes had been made to the applicable portions of the procedure, and that documentation of the basis for determining if a plant change required a 50.59 safety evaluation was still absent from the procedure.

During review of this issue, the inspectors noted that the 10 CFR 50.59 screening process combined many impact evaluations into a single review effort, with only one set of initials provided for verification purposes. The procedure did not require the analyst to document which sections of the Updated Final Safety Analysis Report were reviewed for potential impact. The inspectors concluded that if the personnel responsible for evaluating the change to the reactor coolant gas vent system were also required to document which sections of the Updated Final Safety Analysis Report were reviewed during the design process, there would have been a significantly higher likelihood of recognizing the need for a 10 CFR 50.59 safety evaluation.

The violation was left open because: (1) The Updated Final Safety Analysis Report update for the modification did not include an adequate description of the existence and function of the orifice gate valve (3MU995), and (2) the weakness identified in the 10 CFR 50.59 initial screening (no written justification of screening decisions) had not been corrected.

E8.2 (Closed) Licensee Event Report 95-04: Inoperable Fire Control System

Background

During Surveillance testing, the licensee discovered that preaction valve SA2301MU469 was inoperable. The valve release weight stuck upon electronic actuation and the valve did not open as required. The binding problem was intermittent, evidenced by the fact that during repeated cycling the valve

occasionally opened. The licensee concluded that the valve failed to open because of incorrect assembly by the manufacturer and a mispositioning of the weight switch. Both problems were necessary for the valve to fail. The licensee determined that the valve had been inoperable for an extended period and that the Technical Specification requirement to set a fire watch within 1 hour of failure had not been met.

This valve must open to charge the sprinkler system in the Unit 2 emergency diesel generator (2G002) room. Had the valve failed to open, the sprinkler system would not have been available, and the licensee would have had to rely on the remote fire alarm and manual fire fighting efforts to mitigate the consequences of a fire.

The licensee concluded that the valve became inoperable on September 20, 1994. The problem was discovered on November 14, 1994, at which time a fire watch was established and maintained until the valve was repaired and tested satisfactorily.

Followup

The inspectors reviewed documentation and discussed this event with the licensee and concluded that: (1) the licensee had promptly acted to set a fire watch and to repair the valve, (2) that the failure of the valve was the result of a coincidental combination of two remote causal factors, (3) that no prior information existed to suspect a generic problem necessitating testing of preaction valves beyond the nominal surveillance schedule, and (4) that the licensee's preventive maintenance and testing program was not at fault for not preventing the failure and remained appropriate for future assurance of operability. The inspectors did not consider this event to constitute a violation because the licensee acted within one hour (Technical Specification limit) of the time of discovery to set a fire watch. Based on these considerations, the inspectors considered this item closed.

E8.3 (Closed) Inspection Followup Item 50-361;362/9526-03: Licensee Event Report 50-361;362/95-16): Heating, Ventilation, and Air Conditioning/High Energy Line Break Interactions

Background

The licensee determined that the original architect/engineer review of the plant's response to high energy line breaks had failed to identify the potential for steam from a line break to migrate from environmentally harsh areas to environmentally mild areas through ventilation ducts. The concern was that nonenvironmental-qualified safety-related components in the assumed mild environment spaces could be exposed to high temperature steam and fail to function as designed. The licensee had identified this issue as part of a larger program designed to evaluate the adequacy of all types of barriers in the plant. The issue pertained to both units.

The licensee performed an extensive review to identify spaces vulnerable to this mechanism and to evaluate the potential effect on safety-related components within those spaces. The following four areas of concern were identified:

(1) Control Building/Safety Equipment Building

Temperature switches were installed to stop ventilation fans in the event high temperatures are detected. Some pipe supports were strengthened to lessen the likelihood of pipe whip causing transmission of steam between spaces. All actions were complete for these areas.

(2) Penetration Building

A 2-inch steamline was cut and capped. No other corrective actions were planned.

(3) Radwaste Building

Support modifications were planned. The engineering work was completed but no field implementation had occurred to date. The concern with this area was potential loss of the swing charging pump. For interim operability, the licensee credited alternate charging sources, including high pressure coolant injection.

(4) Doghouse (steam generator blowdown valve area)

The concern with this space was that a ventilation fan in the main steam isolation valve area could bring steam into the doghouse through the ductwork. This could adversely affect the remote position indication of the steam generator blowdown valves. The licensee developed a field change to replace the limit switches on these valves with qualified switches. The switches were on order. Other equipment in the doghouse was potentially affected but was located lower in elevation and out of the way of the expected steam intrusion. For interim operability, the licensee credited thermal stratification of the doghouse, which would prevent sensitive equipment from exposure concerns.

Followup

The inspectors discussed this issue with the licensee and reviewed Licensee Event Report 95-16 and Nonconformance Report 951100064. Based on this review, inspectors concluded that the licensee had performed commendably, first, to identify this issue, and, second, to take aggressive corrective actions. These actions were indicative of a strong, proactive approach to plant safety.

The inspectors were confident that the licensee was on schedule to complete all proposed corrective actions. Interim operability bases appeared reasonable. Accordingly, this issue was considered closed.

V. Management Meetings

X1 Exit Meeting Summary

The inspectors presented the inspection results to members of licensee management at the conclusion of the inspection on November 22, 1996 and during a conference call conducted on December 16, 1996. The licensee acknowledged the findings presented. The licensee did not identify as proprietary any of the information presented to the inspectors during the inspection.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee

D. Axline, Licensing Engineer
D. Brieg, Manager, Station Technical
R. Clark, Manager, Quality Engineering and Fuels
C. Coker, Supervisor, Design Engineering
G. Gibson, Manager, Compliance
J. Hedrick, Manager, NEDO-Plant Engineering
R. Krieger, Vice President, Nuclear Generation
D. Nunn, Vice President, Engineering and Technical Services
J. Rainsberry, Plant Licensing Manager
S. Root, Supervisor, NEDO
H. Smith, Compliance
K. Stagle, Manager, Nuclear Oversight
R. Waldo, Manager, Operations
M. Wharton, Manager, Engineering Design
C. Williams, Supervisor, Compliance
T. Yackle, Manager, Safety Review Committee

Other Organizations

W. Peabody, Consultant, Peabody Associates

NRC

J. Sloan, Senior Resident Inspector

LIST OF INSPECTION PROCEDURES USED

IP 37550	Engineering
IP 37551	Onsite Engineering
IP 92903	Followup- Engineering

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-361;362/9617-01 VIO Failure to Follow Procedure (Section E1.1)

Closed

- 50-361;362/95-04 LER Inoperable Fire Control System (Section E8.2)
- 50-361;362/9526-03 IFI Heating, Ventilation, and Air Conditioning/High Energy Line Break Interactions (Section E8.3)
- 50-361;362/95-16 LER Heating, Ventilation, and Air Conditioning/High Energy Line Break Interactions Interactions (Section E8.3)

Discussed

- 50-361;362/9526-02 VIO Failure to Perform Safety Evaluation (Section E8.1)