



RECEIVED
NRC

Arizona Nuclear Power Project 1985 JUN 24 AM 8:12

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

REGION V I&E
ANPP-32865-EEVB/WFQ/WEI
June 20, 1985

U. S. Nuclear Regulatory Commission
Region V
1450 Maria Lane, Suite 210
Walnut Creek, CA 94596-5368

Attention: Mr. D. F. Kirsch, Acting Director
Division of Reactor Safety and Projects

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1
Docket No. STN 50-528 (License No. NPF-41)
NRC Violation 50-528/85-08/01,02,03
File: 85-019-026; D.4.33.2

Reference: Letter from D.F. Kirsch to E.E. Van Brunt, Jr. dated May 16, 1985,
Subject: NRC Inspection Report 50-528/85-08, 50-529/85-09;
NRC Inspection of Palo Verde Units 1 and 2

Dear Sir:

This letter refers to the inspection conducted by Messrs. R. Zimmerman, C. Fiorelli, and C. Bosted on March 11-April 28, 1985. Based on the results of this inspection, three Notices of Violation concerning the failure to maintain the control room essential ventilation system operable, failure to complete the necessary surveillance testing prior to declaring a component operable, and the failure to take effective corrective action for a condition adverse to quality were issued to ANPP as described in the reference letter. Our responses to the subject Violations are provided as Attachments A, B, and C, respectively. Please be advised that a request for an extension of this response until June 20, 1985 was discussed with T. Young of Region V on June 14, 1985.

Very truly yours,

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

8507150622 850620
PDR ADOCK 05000528
Q PDR

EEVB/TJB/dlm
Attachments

cc: A. C. Gehr (All With Attachments)
E. A. Licitra
R. P. Zimmerman
R. C. Sorenson

11
IE-01

ATTACHMENT A

NRC NOTICE OF VIOLATION
50-528/85-08/01

Technical Specification 3.7.7 requires that both control room essential filtration systems be operable.

Technical Specification 4.7.7.d requires that the control room essential filtration systems be capable of automatic initiation and maintenance of the control room at a positive pressure of at least 1/8-inch water gauge relative to adjacent areas.

Contrary to the above, as a result of two control room access doors (J317 and J319) being maintained open during the period March 1-20, 1985, both control room essential filtration systems were inoperable, in that the filtration systems upon automatic initiation were only capable of maintaining the control room at a positive pressure of 1/20-inch water gauge relative to adjacent areas, less than the required 1/8-inch water gauge.

NOTE:

Based upon our review of the above Notice of Violation, it was identified that the door numbers listed in the Inspection Report (J317 and J319) were apparently transposed.

1. Corrective Steps Which Have Been Taken and the Results Achieved

During the week of March 18, 1985, access door J319, which is the main door into the control room, was propped open, with a guard posted, due to a hardware problem with the door's self-closing device. The door into the tagging office, J317, was blocked open as a convenience for personnel. At that time, a proper evaluation was not made of this configuration as compared to that assumed in the FSAR. When the NRC Inspector questioned the ability of the filtration system to maintain the control room at the required positive pressure of 1/8-inch water gauge with both these doors open, J317 was closed and only opened to permit personnel passage. Door J319 remained open, with a guard posted, until repairs were complete.

The root cause of the violation was lack of familiarity with FSAR Section 6.4, "Habitability Systems", which describes the access doors as a part of the control room essential filtration system design. A Night Order was issued to Unit 1 control room personnel on April 2, 1985. The Night Order clarified the control room HVAC pressure boundary. On April 9, 1985, a functional test confirmed that the filtration systems maintained only a slight positive pressure of 1/20-inch water gauge with doors J317 and J319 both open, but they could maintain the required 1/8-inch water gauge pressure with door J319 open. Repairs to door J319 were completed and the door closed on May 11, 1985. Temporary signs were posted to ensure the control room doors remained closed except for personnel passage.

2. Corrective Steps Which Will be Taken to Avoid Further Items of Noncompliance

Permanent signs requiring that the doors which are part of the control room pressure envelope be kept closed, except for the passage of personnel, will be posted.

3. Date When Full Compliance Will be Achieved

Full compliance will be achieved upon the posting of permanent signs. This is scheduled for completion by June 30, 1985.

ATTACHMENT B

NRC NOTICE OF VIOLATION
50-528/85-08/02

Technical Specification 3.1.2.1.b requires that a boron injection flowpath be operable from the refueling water tank via either a charging pump, a high pressure safety injection pump, or a low pressure safety injection pump to the reactor coolant system.

Technical Specification 4.1.2.3 requires that at least one charging pump, high pressure safety injection pump or one low pressure safety injection pump in the boron injection flowpath required by Technical Specification 3.1.2.1.b be demonstrated operable through surveillance testing in accordance with Section XI of the ASME Boiler and Pressure Vessel Code.

Palo Verde Nuclear Generating Station Procedure 41ST-1CH02, Boron Injection Flowpaths - Shutdown, Revision 2, dated March 1, 1985, paragraph 8.1 requires that the pump being used for credit to satisfy a required boron injection flowpath shall have been tested in accordance with Section XI of the ASME Boiler and Pressure Vessel Code.

Contrary to the above, on March 12, 1985, following performance of 41ST-1CH02, the "A" High Pressure Safety Injection Pump was credited as a portion of the designated boration flowpath without having been tested in accordance with Section XI of the ASME Boiler and Pressure Vessel Code.

1. Corrective Steps Which Have Been Taken and the Results Achieved

On March 14, 1985, at 1640, it was found that the Train "A" HPSI system had been used to provide the required Boron Injection flow path without a current ASME Section XI surveillance test having been performed. Therefore, the pump and associated boron flowpath were not operable. This was a deviation from Tech. Spec. 3.1.2.3. The CEA patch verification testing, which was also in progress, was stopped in accordance with the ACTION statement of Tech. Spec. 3.1.2.3; the ASME Section XI surveillance test for the Train "A" HPSI pump was successfully performed; and the pump and associated boron injection flowpath were declared operable at 2235.

It should be noted that at the time of the event, the plant was in Mode 5. The Train "A" and "B" LPSI boron injection flowpaths were functional and capable of supplying boric acid to the RCS; all surveillance tests for the LPSI injection flowpaths were current, but were not specified by procedure 41ST-1CH02 as operable boron injection flowpaths. In the normal sequence of events, HPSI operability is not required until Mode 4 entry, and ASME Section XI testing was scheduled accordingly. The removal of the charging pumps as a possible boron injection flowpath (red tagged out for maintenance) combined with the status of the LPSI and HPSI systems were contributing factors in the premature designation of the HPSI system as operable.

2. Corrective Steps Which Will be Taken to Avoid Further Items of Noncompliance

The root cause of this occurrence was determined to be error on the part of the operators who were performing the boration flowpath surveillance test. These individuals have been counseled by the Unit 1 Superintendent regarding attention to detail as well as the need to verify completion of procedure steps rather than relying on memory. Control room personnel have been directed to discuss the available boron injection flowpath during shift turnovers. This activity is being documented in the control room log.

In addition, Procedures 41AO-1ZZ01, "Emergency Boration" and 41ST-1CH02, "Boron Injection Flowpaths-Shutdown" have been revised to provide improved guidance to the operations staff for emergency boration in Mode 5 and surveillance test performance by including all alternate boration injection flowpaths.

3. Date When Full Compliance Will be Achieved

Full compliance was achieved with the issuance of Revision 1 of 41ST-1CH02 on June 19, 1985.

ATTACHMENT C

NRC NOTICE OF VIOLATION
50-528/85-08/03

10 CFR 50, Appendix B, Criterion XVI, Corrective Action, requires that for significant conditions adverse to quality, the cause of the condition shall be determined and corrective action taken to preclude repetition.

Technical Specification 3.7.12.a requires in part, that with one or more fire rated assembly penetrations (fire doors, fire dampers, cable, piping and ventilation duct penetration seals) inoperable, an hourly fire watch patrol of the area shall be established.

Technical Specification 6.8.3 states, in part, that temporary changes to procedures may be made provided the change is documented, reviewed by the applicable individual/organization, and approved by the PVNGS Plant Manager, or designee, within 14 days of implementation.

Contrary to the above, the licensee's corrective action for previous violations of 6.8.3 and 3.7.12a could reasonably have been expected to have prevented these repetitive violations:

- ° Several of the fire watch patrols of areas in the Control Building and Auxiliary Building with inoperable fire rated assembly penetrations exceeded the hourly frequency requirement on April 2, and 3, 1985; similar to an occurrence identified by the licensee on March 23, 1985.
- ° On April 10, 1985, four temporary procedure changes were identified by the licensee to have exceeded the required review and approval within fourteen days; similar instances were previously identified by the licensee on February 20, 25, and March 30, 1985.

Ineffective Corrective Action

Although the examples of the fire watch patrols cited by the violation do represent repetitive occurrences, it should be noted that ANPP had identified the problems, recognized that initial correction actions were insufficient, and was actively pursuing resolution. Therefore, the categorization of this item as ineffective corrective action is inappropriate.

The problem of temporary procedure changes exceeding the 14-day review and approval cycle is a separate issue. Here again, ANPP identified the problem, however, as discussed below, the root cause was not correctly identified at the outset. Therefore, the early attempts at resolution were misdirected. The root cause has since been determined, and effective corrective actions are being implemented.

As each of these is an individual case, they have been addressed separately here.

Improper Fire Patrols

1. Corrective Steps Which Have Been Taken and the Results Achieved

On March 23, 1985, problems with the security computer system resulted in improper fire patrols by constructor fire watch personnel (Reference LER 85-016-00) who demonstrated a lack of appreciation for the importance of their responsibilities. Initial corrective actions included reemphasizing to the roving patrols the importance of their fire watch duties, directing the patrols to report all problems to the Fire Protection Staff for resolution, and ensuring that the Security and Operations Departments were cognizant of the potential effects of security computer problems on the roving fire watch patrols.

On March 31, 1985, the Shift Supervisor contacted the Fire Protection Supervisor, expressing concern about the performance of the roving patrols. Reviews of logs for April 1 and 2 revealed that continuing problem of intervals longer than one hour were occurring between consecutive rounds by the roving patrols. Discussions were held with the supervising foreman. By April 4, performance had still not achieved satisfactory levels. A review by the Fire Protection Supervisor, the cognizant Utility Maintenance Staff Supervisor, and the Contractor's Construction Superintendent resulted in special training sessions for all fire watch personnel, modified shift turnover times, and increased surveillance by the Fire Protection Staff. On April 8, review of log readings revealed improved performance, yet there were periodic failures to maintain less than one hour between rounds. Disciplinary measures, including termination, failed to prove effective. New, clarified logs helped somewhat, but occasional problems were still being experienced. The root cause of constructor personnel attitude remained unresolved. These conditions were discussed in LER 85-016-01.

2. Corrective Steps Which Will be Taken to Avoid Further Items of Noncompliance

As a result of those problems with constructor personnel, ANPP employees assumed roving fire watch responsibilities on April 10, 1985. On April 11 and 15, additional failures to conduct rounds within 60 minutes occurred. A letter that provided improved, specific direction, including a reduction to 40 minutes of allowable time between rounds was issued by the cognizant superintendent to all fire watch personnel. This action along with the improved logs, more detailed instructions, and more extensive monitoring by station staff has resulted in properly conducted roving fire patrols. Periodic reviews to date indicate the generic problem has been fully addressed even though there has been an additional deficiency identified.

3. Date When Full Compliance Will be Achieved

Full compliance was achieved on April 16, 1985 with issuance of the aforementioned letter.

Procedure Change Notices Not Receiving Required Approvals

1. Corrective Steps Which Have Been Taken and the Results Achieved

In recent months, ANPP identified several temporary procedure changes that were not reviewed and approved within the 14-day period pursuant to Tech. Spec. 6.8.3. These instances were originally attributed to individual failure to comply with station procedures, and corrective action was approached on that basis with individual counseling of the persons involved. However, the problem continued, and ANPP increased its corrective efforts accordingly.

The root cause was subsequently determined to be a procedure which did not adequately describe the responsibility for obtaining review and approval of temporary procedure changes; which contained impractical directions (resulting in personnel failure to comply); and which was not conducive to the high volume, short turn-around review cycle necessary as the plant approached power operation and procedure change activities escalated.

As an interim measure, control room personnel are maintaining a record of temporarily approved procedure changes. This list is reviewed each working day to ensure that individual changes are being processed in a timely manner to support the balance of the review and approval cycle. In addition, the Plant Manager issued a letter to all PVNGS supervisory personnel reminding them of the 14-day review requirement and requesting that they review their areas of responsibility to ensure there are no other procedure changes which have not been fully reviewed.

In order to determine the scope of the problem, ANPP Quality Assurance will conduct a review of PCNs to ensure that these changes which were initiated prior to implementation of this program and which may exceed the 14-day review requirement, are identified and processed.

2. Corrective Steps Which Will be Taken to Avoid Further Items of Noncompliance

The procedure which controls the review and approval of procedure changes (70AC-OZZ09) is undergoing a major revision to clarify the responsibilities for the timely review and approval of temporary changes. The revised procedure will be tailored to address the concerns identified.

3. Date When Full Compliance Will be Achieved

The revision to 70AC-OZZ02, Review and Approval of Station Procedures will be issued and the QA review completed by July 15, 1985.