

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos: 50-528/88-23, 50-529/88-23 and 50-530/88-22.

Docket Nos: 50-528, 50-529, 50-530

License Nos: NPF-41, NPF-51, NPF-74

Licensee: Arizona Nuclear Power Project  
P. O. Box 52034  
Phoenix, AZ. 85072-2034

Facility Name: Palo Verde Nuclear Generating Station Units 1, 2 & 3.

Inspection Conducted:

Inspector:	<u>STJ A RD</u> FOR	<u>9-20-88</u>
	T. Polich, Senior Resident Inspector	Date Signed
Inspector:	<u>STJ A RD</u> FOR	<u>9-20-88</u>
	J. Ball, Resident Inspector	Date Signed
Inspector:	<u>STJ A RD</u> FOR	<u>9-20-88</u>
	G. Fiorelli, Resident Inspector	Date Signed
Approved By:	<u>STJ A RD</u>	<u>9-20-88</u>
	S. Richards, Chief, Engineering Section	Date Signed

Summary:

Inspection on July 05, through August 13, 1988 Report Numbers 50-528/88-23, 50-529/88-23 and 50-530/88-22.

Areas Inspected: Routine, onsite, regular and backshift inspection by the three resident inspectors. Areas inspected included: previously identified items; review of plant activities; areas observed on plant tours: operating logs and records, monitoring instrumentation, shift manning, equipment lineups, equipment tagging, general plant equipment conditions, fire protection, plant chemistry, security, plant housekeeping, radiation protection controls; engineered safety feature system walkdowns; surveillance testing; plant maintenance; auxiliary transformer fire - Unit 1; reactor coolant pump third stage seal pressure sensing line weld cracks - Units 1 and 3; startup testing - Unit 2; loss of engineered safety feature service transformer - Unit 2; temporary instruction 2515-94, power moderator dilution requirements - Units 1, 2 and 3; followup of licensee event report - Units 1, 2 and 3; review of periodic and special reports - Units 1, 2 and 3.

During this inspection the following Inspection Procedures were covered: 30703, 37700-1, 37700-2, 61702, 61705, 61706, 61708, 61709, 61710, 61726, 62703, 71707, 71709, 71710, 72700, 72701, 92701, 92702, 92703, 93702.

Results: Of the 12 areas inspected, no potential violations were identified. Significant items reviewed or observations made were as follows:

- The catastrophic failure of the Unit 1 Auxiliary Transformer resulted in part from inadequate preventive maintenance on the non-class switchgear. The event is discussed in Section 7 of this report.
- The licensee discovered two Reactor Coolant Pump third stage seal pressure sensing line weld cracks during this report period (see Section 8) as a result of timely implementation of commitments to Generic Letter 88-05.
- The Unit 2 startup test results were reviewed and found to be satisfactory (see Section 9).
- The loss of an Engineered Safety Features Service Transformer at Unit 2 resulting from inadequate control of a temporary ventilation duct is described in Section 10.

## DETAILS

### 1. Persons Contacted:

The below listed technical and supervisory personnel were among those contacted:

#### Arizona Nuclear Power Project (ANPP)

R. Adney, Manager, Plant Standards and Control  
\*J. Allen, Plant Manager, Unit 1  
P. Brandjes, Manager, Central Maintenance  
F. Buckingham, Operations Manager, Unit 2  
\*R. Butler, Director, Standards and Technical Support  
W. Doyle, Manager, Radiation Protection, Unit 2  
\*J. Driscoll, Assistant Vice President, Nuclear Production  
W. Fernow, Manager, Training  
R. Gouge, Operations Manager, Unit 3  
\*J. Haynes, Vice President, Nuclear Production  
W. Ide, Plant Manager, Unit 2  
D. Karner, Exec. Vice President, ANPP Administration  
\*J. Kirby, Director, Site Services  
R. Logan, Supervisor, Central Radiation Protection  
K. Oberdorf, Manager, Radiation Protection, Unit 1  
R. Papworth, Director, Quality Assurance  
W. Quinn, Director, Nuclear Safety & License  
H. Riley, Jr. Lead Mechanical Engineer  
\*T. Shriver, Manager, Compliance  
\*J. Scott, Manager, Chemistry Unit 3  
J. Sills, Supervisor, Radiation Protection Standards  
G. Sowers, Manager, Engineering Evaluations  
R. Younger, Operations Manager, Unit 1  
\*O. Zeringue, Plant Manager, Unit 3

The inspectors also talked with other licensee and contractor personnel during the course of the inspection.

\*Attended the Exit Meeting on August 18, 1988.

### 2. Previously Identified Items - Units 1, 2 and 3.

- a. (Closed) Followup Item (528/88-10-01): "Diesel Generator Failure Report Did Not Contain A Root Cause of Failure - Unit 1.

The licensee's initial Special Report, 1-SR-88-003, discussed a valid emergency diesel generator failure. This report did not contain an evaluation of the root cause of the failure. The licensee has subsequently completed an Engineering Evaluation and determined the failure to be an intermittently faulty contact in the closing circuitry. The contact monitors the breaker close charging springs and provides a permissive in the

breaker closing circuitry when closing springs are charged. The faulty contact was replaced and the breaker operated properly. Additionally the licensee submitted a supplement to report I-SR-88-003. This item is closed.

- b. (Closed) Followup Item (529/88-02-02): "Essential Cooling Pump Room Alarms" - Unit 2.

This matter deals with the spurious alarms from the essential cooling water system radiation detectors, which were being ignored by workers.

The inspector confirmed that the operating staff has submitted an Engineering Evaluation Request (EER) to modify the system so that alarms will be meaningful when sounded. During recent tours of the area, the inspector noted the alarms were not sounding. This item is closed. Further followup will be pursued as part of the routine inspection program.

- c. (Closed) Enforcement Item (529/88-02-03): "Operator Error Inadvertent SIAS - CIAS" - Unit 2.

The inspector verified that the lessons learned from this event had been factored into the operator requalification program. A random selection of operator records indicated they had received the training. This item is closed.

- d. (Closed) Enforcement Item (529/88-02-04): "Inoperability of One of the Auxiliary Feedwater Pumps" - Unit 2.

The inspector verified that the lessons learned from the event had been factored into the operator requalification training program. A random selection of operator records indicated they had received the training. In addition the inspector verified that the valve position indication rod had been cut to eliminate the confusion as to whether the auxiliary feedwater pump discharge valve was open or closed. An evaluation of other plant valves was conducted by the licensee for a similar potential problem and none was found. This item is closed.

- e. (Closed) Followup Item (530/87-12-01): "Licensee Actions To Reduce Backlog of Out-of-Tolerance Notices" - Unit 3.

This item refers to an inspector's concern with regard to a large backlog of Out-of-Tolerance notices for measuring and test equipment which had not been evaluated by the licensee.

During this inspection, the inspector reviewed the status of the backlog and found that the licensee had reduced it to near zero and had managed to maintain it at that level over the past 3 to 4 months. Based on the results of the licensee efforts in this area, this item is closed.



f. (Closed) Deviation (530/87-19-01): "Auxiliary Steam Line Isolation System Inoperable" - Unit 3.

This item concerns the failure of the licensee to ensure the operability of a non-safety grade system whose function is the isolation of the auxiliary steam line upon sensing of a high differential pressure, as would occur in certain areas of the auxiliary building should a postulated break in the steam line occur. This deviation was identified by the inspector during a walkdown of the system in Unit 3. The inspector found a number of differential pressure switches isolated due to the licensee's failure to remove plastic caps from the ends of the sensing lines at the completion of construction. As an immediate action, the licensee returned the system to an operable status. The licensee performed inspections in Units 1 and 2 as well and found similar discrepancies. Likewise, as an immediate corrective action, the system was returned to an operable status in the two units. A review of this situation by the licensee determined that the root cause of this deviation was attributable in part to a less than adequate walkdown of the system at the time of system acceptance by operations and the lack of any preventive maintenance program to ensure continued operability. In addition, the licensee apparently failed to recognize this non-safety grade subsystem as having been installed in response to commitments made to the NRC. The licensee therefore conducted a review of the facility FSAR in an effort to identify other commitments made for non-safety related systems. Through this review, a total of 21 other commitments made to the NRC were identified that had not been tracked by the licensee. The licensee has subsequently confirmed that these commitments have been met. Based on the reviews performed by the licensee and the establishment of a preventive maintenance program for ensuring continued operability of the auxiliary steam isolation system, this item is closed.

3. Review of Plant Activities.

a. Unit 1

The plant began the inspection period at 100% power. On July 6, 1988, an electrical bus fault resulted in a catastrophic failure of and fire damage to the unit auxiliary transformer. (See Section 7. Auxiliary Transformer Fire - Unit 1)

The loss of the unit 13.8kv buses as a result of the electrical faults caused a reactor trip due to the loss of reactor coolant pumps. The unit was stabilized in Mode 3 on natural circulation until power was restored to a reactor coolant pump on July 7, 1988. The plant was cooled down on forced circulation to Mode 5.



The plant remained shutdown while inspection and repair of the damaged electrical equipment and other Mode 5 work took place. The plant was in Mode 4 at the end of the report period making preparations for restart of the unit.

b. Unit 2

The plant operated at essentially 100% during the report period.

c. Unit 3

Unit 3 operated at essentially 100 percent power until July 31, 1988, when a fault on the "B" phase main transformer resulted in a main turbine generator trip and reactor power cutback to 30 percent power. The transformer was apparently struck by lightning during a passing thunderstorm. Reactor power was further reduced to 10 percent power by the licensee while damage to the main transformer was assessed. On August 1, 1988, the licensee decided to place the unit in Mode 3 while repairs to the transformer were accomplished and other short duration equipment outages were undertaken. During this outage the licensee disassembled and inspected the rotating assemblies of all three auxiliary feedwater pumps for cracking which was previously identified in Unit 1. Also, portions of the units 13.8kv non-class switchgear were inspected for cleanliness and degradation of insulating materials in response to problems found in Unit 1 following the failure of the Unit 1 unit auxiliary transformer. At the end of the inspection period, the unit remained in Mode 3, while flushing of the unit main generator stator water system was being performed based on recommendations from the licensee's main generator vendor, General Electric.

d. Plant Tours

The following plant areas at Units 1, 2 and 3 were toured by the inspector during the course of the inspection:

- o Auxiliary Building
- o Containment Building
- o Control Complex Building
- o Diesel Generator Building
- o Radwaste Building
- o Technical Support Center
- o Turbine Building
- o Yard Area and Perimeter

The following areas were observed during the tours:

1. Operating Logs and Records Records were reviewed against Technical Specification and administrative control procedure requirements.



2. Monitoring Instrumentation Process instruments were observed for correlation between channels and for conformance with Technical Specification requirements.
3. Shift Manning Control room and shift manning were observed for conformance with 10 CFR 50.54.(k), Technical Specifications, and administrative procedures.
4. Equipment Lineups Valve and electrical breakers were verified to be in the position or condition required by Technical Specifications and Administrative procedures for the applicable plant mode. This verification included routine control board indication reviews and conduct of partial system lineups.
5. Equipment Tagging Selected equipment, for which tagging requests had been initiated, was observed to verify that tags were in place and the equipment was in the condition specified.
6. General Plant Equipment Conditions Plant equipment was observed for indications of system leakage, improper lubrication, or other conditions that would prevent the system from fulfilling their functional requirements.
7. Fire Protection Fire fighting equipment and controls were observed for conformance with Technical Specifications and administrative procedures.
8. Plant Chemistry Chemical analysis results were reviewed for conformance with Technical Specifications and administrative control procedures.
9. Security Activities observed for conformance with regulatory requirements, implementation of the site security plan, and administrative procedures, included vehicle and personnel access, and protected and vital area integrity.
10. Plant Housekeeping Plant conditions and material/-equipment storage were observed to determine the general state of cleanliness and housekeeping. Housekeeping in the radiologically controlled area was evaluated with respect to controlling the spread of surface and airborne contamination.
11. Radiation Protection Controls Areas observed included control point operation, records of licensee's surveys within the radiological controlled areas, posting of radiation and high radiation areas, compliance with Radiation Exposure Permits, personnel monitoring devices being properly worn, and personnel frisking practices.

No violations of NRC requirements or deviations were identified.

4. Engineered Safety Feature System Walkdowns - Units 1, 2 and 3.

Selected engineered safety feature systems (and systems important to safety) were walked down by the inspector to confirm that the systems were aligned in accordance with plant procedures. During the walkdown of the systems, items such as hangers, supports, electrical cabinets, and cables were inspected to determine that they were operable and in a condition to perform their required functions.

Unit 1

Accessible portions of the following systems were walked down during this inspection period.

System

- o Emergency 125 V DC Power, Trains "B" and "D".
- o Emergency Diesel Generators Trains "A" and "B".

Unit 2

Accessible portions of the following systems were walked down during this inspection period.

System

- o Emergency 125 V DC Power, Trains "B" and "D".

Unit 3

Accessible portions of the following systems were walked down during this inspection period.

System

- o Emergency 125 V DC Power, Trains "B" and "D".

No violations of NRC requirements or deviations were identified.

5. Surveillance Testing - Units 1, 2 and 3.

- a. Surveillance tests required to be performed by the Technical Specifications (TS) were reviewed on a sampling basis to verify that: 1) the surveillance tests were correctly included on the facility schedule; 2) a technically adequate procedure existed for performance of the surveillance tests; 3) the surveillance tests had been performed at the frequency specified in the TS; and 4) test results satisfied acceptance criteria or were properly dispositioned.
- b. Portions of the following surveillances were observed by the inspector during this inspection period:



Unit 1

<u>Procedure</u>	<u>Description</u>
o 41ST-1ZZ24	Startup Channel High Neutron Flux Alarm Inoperable.
o 36ST-9SB02	PPS Bistable Trip Unit Functional Test.

Unit 2

<u>Procedure</u>	<u>Description</u>
o 36ST-2SE06	Log Power Functional Test.
o 42ST-2ZZ33	Mode 1 Surveillance Logs.

Unit 3

<u>Procedure</u>	<u>Description</u>
o 36ST-9SB02	PPS Bistable Trip Unit Functional Test.
o 43ST-3ZZ05	Weekly Electrical Distribution Check.

No violations of NRC requirements or deviations were identified.

6. Plant Maintenance - Units 1, 2 and 3

- a. During the inspection period, the inspector observed and reviewed documentation associated with maintenance and problem investigation activities to verify compliance with regulatory requirements, compliance with administrative and maintenance procedures, required QA/QC involvement, proper use of safety tags, proper equipment alignment and use of jumpers, personnel qualifications, and proper retesting. The inspector verified reportability for these activities was correct.
- b. The inspector witnessed portions of the following maintenance activities:

Unit 1Description

- o Restoration of the S02 Power Supply Bus.
- o S01 Electrical Bus Inspection.
- o Restoration of the S01, S03 and S05 Power Supply Buses.
- o Design Change on PPS.
- o Restoration of the S04 and S06 Power Supply Buses.
- o Re-insulation of 13.8kv Bus Work.



Unit 2Description

- o Motor Bearing Oil Replacement "B" Train Containment Spray Pump.
- o Essential Cooling Process Radiation Monitor Train "A" Troubleshooting and Calibration.
- o Hydrogen Analyzer Train "B" Leakage Check.

Unit 3Description

- o Motor Bearing Oil Replacement "A" Train Nuclear Cooling Pump.
- o Repair to Reactor Coolant Pump 1A Seal Pressure Sensing Line.
- o Disassembly and Inspection of Auxiliary Feedwater Pump Train "B".
- o Radiation Monitoring System Loop Troubleshooting.

No violations of NRC requirements or deviations were identified.

7. Auxiliary Transformer Fire - Unit 1.

On July 6, 1988, while operating at 100% power, Unit 1 experienced a phase B to ground fault on bus 1E-NAN-S02. The fault ultimately caused all three phases to short to ground at 12:08 PM (MST). Approximately 12 cycles later the Unit Auxiliary Transformer (UAT) started to internally fault and the pressure and gas buildup caused the sudden pressure relay to initiate. After 14.5 cycles the sudden pressure relay lock out picked up, initiating a main generator excitation trip. Additionally, trip signals were generated for breakers NAN-S01A and NAN-S02A, the main generator breakers, and the turbine. At approximately 17.5 cycles the UAT fault propagated into a three phase fault. Between 17.5 and 20.5 cycles the UAT catastrophically failed resulting in a transformer fire. At approximately 20.5 cycles the main generator breakers opened, as did the breakers for NAN-S01 and NAN-S02.

Due to the loss of the transformer and the opening of breakers NAN-S01A and NAN-S02A, electrical power was lost to the reactor coolant pumps (RCPs) which caused a reactor trip on low DNBR. The licensee declared an Unusual Event (UE) at 12:15 PM due to the fire in the UAT. The fire was declared extinguished at 12:21 PM and the UE was terminated. The licensee discovered later that the termination was an improper determination and concurrent with a second fire in bus NAN-S02, the UE was re-declared at 1:03 PM.

At 12:30 PM the plant was stabilized in Mode 3. The emergency diesel generators were started and placed on line to supply power to Engineered Safety Features (ESF) buses as a precaution, since the ESF transformers were being sprayed with water from the fire protection system.



After the undervoltage flags had been reset, the licensee attempted to re-energize the 13.8kv bus NAN-S02 from the startup transformer at 1:03 PM. The breaker tripped open and a fire was reported in the NAN-S02 bus. The licensee did not know that the NAN-S02 bus was the initiating bus fault when the bus was re-energized.

While the plant remained in natural circulation, extensive visual inspections, cleaning and testing were conducted on the NAN-S01 bus and switchgear. The bus was re-energized at 5:49 PM and at 11:09 PM the licensee unsuccessfully attempted to start RCPs 1A and 2A. The cause of the two RCP start failures was determined to be low voltage on the "F" battery bus. The licensee subsequently removed the battery from the charger and increased the charger voltage. The 1A RCP was successfully started at 12:33 AM on July 7, 1988. The UE was terminated at 1:02 AM, after forced circulation was re-established and the ESF transformers were re-energized. The resident inspectors remained on site throughout the event and contact was continually maintained with the Regional Office. Region V dispatched an electrical inspector to the site on July 7, 1988, and Regional Management arrived on July 8, 1988, to assess the licensee's approach to the root cause investigation of the event.

Subsequently a technical meeting was held with the licensee on August 3, 1988, at NRR with Region V management representation, to discuss the results of the licensee's Post Trip Review Report 1-88-004, "Unit 1 Auxiliary Fire and Reactor Trip." The licensee's evaluations concluded that the initiating electrical fault on NAN-S02 was related to an inadequate preventative maintenance (PM) program for the non-class switchgear and the degradation of the bus bar insulation. The inspectors have monitored subsequent inspection, repair and testing of the non-class electrical buses. The return to power and further testing of the electrical equipment will continue to be closely monitored by the inspectors.

No violations of NRC requirements or deviations were identified.

8. Reactor Coolant Pump Third Stage Seal Pressure Sensing Line Weld Cracks - Units 1 and 3.

During this inspection period, while Units 1 and 3 were in forced outages, the licensee conducted inspections inside containment aimed at identifying the accumulation of boric acid on components within the reactor coolant system boundary and interconnecting systems. This activity was performed in accordance with licensee commitments to NRC Generic letter 88-05. During initial inspections in Unit 1, an accumulation of approximately 75 pounds of boric acid was found within the vicinity of reactor coolant pump 1A, specifically in the area of the third stage seal pressure sensing line. Further investigations identified a cracked flange to spool piece socket weld on the pressure sensing line. Disassembly and inspection of the failed spool piece along with metallurgical analysis of the weld surface found the failure to be the result of high cycle fatigue cracking. While still reviewing the circumstances surrounding the weld failure in Unit 1, a similar failure was found on the third



stage seal pressure sensing line for reactor coolant pump 1A in Unit 3, during a walkdown of containment conducted subsequent to the unit's entry into Mode 3 on August 1, 1988. In response to these failures the licensee initiated an engineering evaluation request for determination of the root cause of failure and subsequent repairs. Extensive vibration readings were taken and an analysis was performed on the running reactor coolant pumps in Unit 3. The licensee found that the adjustment of U-bolt type pipe supports for the sensing lines greatly affected the stress induced in the flange to spool piece weld that failed. While meant to act as only a two-directional restraint, the U-bolt supports were found to have been tightened to the extent that no clearance existed. This condition would not allow the pipe to slide as a result of thermal growth. In addition, since these supports are bolted to the pump motor support stand, the vibrating motion of the pump stand was being transported to the piping system. The licensee concluded that loosening of the U-bolts would eliminate both the problem of inducing thermal stresses and vibratory motion. With Unit 1 in Mode 5, the licensee was able to replace the failed joint with a newly welded joint. In Unit 3, the licensee repaired the failed joint by encasing it in furmanite material and adding a stiffener to the piping system in order to reduce further propagation of the weld crack. Justification for continued operation of Unit 2 was based partially on a calculation of a maximum leak rate of 41 gallons per minute under worst case conditions, should a catastrophic failure of one of the sensing lines occur during operations. Additionally, no significant boric acid deposits were observed in the vicinity of the RCPs during the recent Unit 2 outage. The licensee has committed to the inspection of the sensing lines in Unit 2 at the earliest available unit outage. Based on the inspector's review of the licensee's analysis and actions to date, no additional concerns were identified. The inspector encouraged the licensee to continue to be diligent in identifying boric acid accumulations, determining their source and taking corrective action when possible. The inspector will continue to follow the licensee's long term efforts in this area as a part of the routine inspection program.

No violations of NRC requirements or deviations were identified.

9. Startup Testing - Unit 2.

The inspector reviewed the results of the following tests performed before or during the Unit 2 startup from its refueling outage; this was to verify that the results either met the acceptance criteria or were properly resolved.

- |            |   |
|------------|---|
| 72PY-9RX01 | Reload Criticality and Low Power Physics Tests. |
|            | o Control Element Assembly (CEA) Worth          |
|            | o Shutdown Margin                               |
|            |   |
| 72PA-2ZZ07 | Reload Power Ascension Test.                    |
|            | o Power Coefficient                             |
|            | o Isothermal Temperature Coefficient            |



- o Moderator Temperature Coefficient
  - o Core Power Distribution
- 72PA-9RX01 Power Calibration.
- o Excure Instrumentation/Heat Balance Power Comparison
- 73ST-9RX01 CEA Drop Time.
- o Rod Trip Times vs Technical Specifications

No violations of NRC requirements or deviations were identified.

10. Loss of Engineered Safety Feature Service Transformer - Unit 2.

On July 26, 1988, the Unit 2 "B" train engineered safety features 13.8 - 4.16KV transformer was lost when a section of temporary "elephant trunk" type ventilation duct, stretched across the roof of the turbine building, blew off and shorted across the power lines to the transformer. When power was lost to the 4.16KV emergency bus, a loss of power signal was generated which activated the balance of plant engineered safety features systems. The "B" diesel generator started and all equipment operated as designed. At the time of the transformer loss, Unit 2 was operating at 100%. The plant continued to operate as non-essential loads were being fed from the main generator. Inspections and tests were conducted on the transformer and power lines and no problems were found. All systems were restored to normal following confirmation that no damage occurred.

The inspectors questioned the licensee's program for evaluating temporary installations for effects on safety related equipment. The licensee is conducting a Special Plant Engineering Evaluation Report (SPEER) on this event. The inspectors will review the SPEER and assess the licensee's corrective actions. The inspector additionally questioned the licensee's use of a fire hose to drain oily water from the roof of the Unit 1 radiation waste building. The licensee removed this fire hose.

The same type of temporary ventilation duct was used on Units 1 and 3. The Unit 1 duct was short enough to prevent a similar occurrence. The Unit 3 duct was shortened immediately after the Unit 2 problem was identified. Additionally, the Unit 3 duct was held in place with metal bands while the Unit 2 duct was tied with rope.

No violations of NRC requirements or deviations were identified.

11. Temporary Instruction 2515-94 Power Moderator Dilution Requirements - Units 1, 2 and 3.

This Temporary Instruction refers to an NRR Information Memorandum No. 7, "Power Moderator Dilution," issued on October 4, 1977. Letters were sent to all operating power licensees. At the time, Palo Verde was in the final phases of plant design. The Palo Verde operating units presently do have redundant boron dilution alarm



systems installed. These alarms operate off of the startup count rate instrumentation and provide boron dilution alarms in modes 3 through 6. This is consistent with the Safety Evaluation Report commitment. Abnormal operating procedures have been written to cover alarm followup. This item is closed for all 3 units.

12. Followup Licensee Event Report (LER) - Units 1, 2 and 3.

The following LERs were reviewed by the inspector. Based on the information provided in the report, it was concluded that reporting requirements had been met, root causes had been identified, and corrective actions were appropriate. These LERs are considered closed.

Unit 1

<u>LER NUMBER</u>	<u>DESCRIPTION</u>
88-05-00	Broken Post Isolation Valve (PIV) Renders Unit 1 Fire Water Suppression Loop Inoperable - Continuous Fire Watches Were Late.

Unit 2

<u>LER NUMBER</u>	<u>DESCRIPTION</u>
87-08-00	Manual Reactor Trip Initiated Due to Loss of Both Main Feedwater Pumps.
87-13-00	Loose Silicon Controlled Rectifier In Inverter Forces Unit Shutdown.
88-10-00	Misinterpretation Surveillance Test Interval Exceeded for Plant Vent.

No violations of NRC requirements or deviations were identified.

13. Review of Periodic and Special Reports - Units 1, 2 and 3.

Periodic and special reports submitted by the licensee pursuant to Technical Specifications 6.9.1 and 6.9.2 were reviewed by the inspector.

This review included the following considerations: the report contained the information required to be reported by NRC requirements; test results and/or supporting information were consistent with design predictions and performance specifications; and the validity of the reported information. Within the scope of the above, the following reports were reviewed by the inspector.

Unit 1

- o Monthly Operating Report for June, 1988.
- o The licensee's initial Special Report 1-SR-88-003, which discussed a valid emergency diesel generator failure.



Unit 2

- o Monthly Operating Report for June, 1988.

Unit 3

- o Monthly Operating Report for June, 1988.

No violations of NRC requirements or deviations were identified.

14. Exit Meeting

The inspector met with licensee management representatives periodically during the inspection and held an exit on August 18, 1988. During the exit meeting, the inspector discussed topics in the enclosed report; comments were also provided on the continued need on the part of the licensee to maintain a professional control room demeanor. A reminder for the licensee to expedite resolution and closure of previous licensee commitments to the NRC was also made. The licensee acknowledged the inspector's comments.