

San Onofre 3

Initiating Events



Significance: Jun 16, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadvertent reactor cavity leakage to SG 2E088

The inspectors identified a noncited violation for a lapse in procedural compliance that resulted in a leak path for water from the reactor refueling cavity across a steam generator nozzle dam to the cold leg side of Steam Generator 2E088. This was a violation of 10 CFR Part 50, Appendix B, Criterion V. This issue was more than minor because it resulted in an inadvertent leak from the reactor coolant system of approximately 1500 gallons. The finding was considered to have very low safety significance because the leak rate was very small (approximately 0.3 gallons per minute), and the leak was quickly isolated once it was identified. This violation is in the licensee's corrective action program as Action Request 020601156.

Inspection Report# : [2002002\(pdf\)](#)



Significance: Feb 27, 2002

Identified By: NRC

Item Type: FIN Finding

Failure to take effective measures to control maintenance activities in the switchyard.

On February 27, 2002, the licensee, contrary to procedural expectations, failed to provide adequate oversight of switchyard maintenance activities which resulted in a complete loss of offsite power to Unit 3. Specifically, the licensee's procedure for controlling maintenance activities in the switchyard, Technical Procedure SO123-V.2.10, "Switchyard Work Performance," Revision 3, had a stated goal to control work within the switchyard, especially when the work may adversely effect unit availability. Contrary to this stated goal: (1) the licensee allowed San Diego Gas & Electric personnel to perform Breaker Failure Local Backup relay testing on the de-energized Southwest Bus of the of the San Diego Gas & Electric portion of the San Onofre Nuclear Generating Station's switchyard without this activity having been reviewed by the Switchyard Oversight Committee; and (2) the licensee allowed San Diego Gas & Electric relay technician to perform this activity without any oversight or precautionary brief, even though only one remaining bus was available to provide offsite power to Unit 3. The San Diego Gas & Electric relay technician, due to misunderstanding the limits set forth in the work request, exceeded the authorized work scope and chose to test the cross bus trip signal between the southwest bus and the southeast bus. While performing this activity, the technician failed to isolate the relay from the rest of the bus. Subsequently, the resulting signal tripped all the breakers connected to the southeast bus, including the Unit 3 main transformer breaker and Unit 3 reserve auxiliary transformer breakers. This caused the Unit 3 main turbine/generator to trip, the reactor tripped, plus both emergency diesel generators and auxiliary feedwater started. This finding was evaluated under the risk significance determination process as having very low safety significance since there was no actual loss of safety function, i.e., the emergency diesel generators started successfully and the reactor coolant pumps continued to operate with power from Unit 2. The licensee placed this issue in their corrective action program as Action Request 020201440-5.

Inspection Report# : [2002008\(pdf\)](#)

Mitigating Systems



Significance: Mar 23, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Lack of corrective actions for screenwash system water hammer

The inspectors identified a noncited violation for the licensee's lack of corrective action to mitigate a water hammer condition in screenwash system piping until prompted by the inspectors. This issue was more than minor because this condition had the potential to affect the operability of the safety-related saltwater cooling pumps. This was a violation of 10 CFR Part 50, Appendix B, Criteria XVI. The finding was considered to have very low safety significance because the screenwash piping remained within ANSI codes for allowable stress, no actual rupture of screenwash piping occurred, and the operability of the saltwater cooling pumps was not actually affected by the condition. This violation is in the licensee's corrective action program as Assignment 26 to Action Request 010300938.

Inspection Report# : [2001014\(pdf\)](#)

G**Significance:** Mar 23, 2002

Identified By: Licensee

Item Type: NCV NonCited Violation

Inoperable train of the CREACUS system

Operators did not properly change the recorder paper and therefore unknowingly caused the flow-indicating controller and one train of the control room emergency air cleanup system to be inoperable. This issue was more than minor because it had the potential to affect the integrity of the control room envelope. This was a violation of Technical Specifications 3.0.4 and 3.0.3 for Units 2 and 3, respectively, and was characterized as a noncited violation. This finding was of very low safety significance because the issue only represented a degradation of the radiological barrier function of the control room. This violation is in the licensee's corrective action program as Action Request 011001218.

Inspection Report# : [2001014\(pdf\)](#)

Barrier Integrity

G**Significance:** Sep 24, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Inadequate corrective actions in response to a Part 21 notification

The inspectors identified a noncited violation after the licensee implemented inadequate corrective actions in response to a Part 21 notification for Asea Brown Boveri K-line circuit breakers. The licensee was unaware that Containment Cooling Fan 3ME402 Circuit Breaker 3B0611 was within scope of the Part 21 notification until after two surveillance test failures occurred. This was a violation of 10 CFR Part 50, Appendix B, Criterion XVI. The issue was considered more than minor because it resulted in Containment Cooling Fan 3ME402 exceeding its allowed Technical Specification outage time of 7 days. However, the finding was considered to have very low safety significance because of a low probability for failure (three failures out of approximately 10,000 breakers in service industry-wide), and both containment cooling trains remained capable of performing their safety function.

Inspection Report# : [2002006\(pdf\)](#)

Emergency Preparedness

G**Significance:** Nov 08, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Procedures inadequate to implement a site area emergency action level

A noncited violation of 10 CFR Part 50, Appendix E IV.B was identified for inadequate procedures for implementation of an emergency action level. EAL C.3.1(c) requires that a site area emergency be declared if radiation readings outside of containment exceed established levels. These locations are not monitored by installed devices and licensee procedures do not require these readings to be taken. The finding was determined to be a performance deficiency in that the licensee failed to identify that, during certain plant conditions, the emergency response procedures would not evaluate EAL C.3.1(c.) The finding was evaluated using the Emergency Preparedness Significance Determination Process to be more than minor because failure to evaluate a potential SAE could result in delayed facility and public evacuations. The finding was evaluated as having very low safety significance, since it was a failure of a regulatory requirement but not a failure to meet an emergency planning standard. This violation is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy.

Inspection Report# : [2002006\(pdf\)](#)

Occupational Radiation Safety

G**Significance:** Jan 11, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Release of radioactive material from the restricted area

Technical Specification 5.5.1 requires procedures for the control of radioactivity. Procedure SO123-VII-20.9.2, "Material Release Surveys," Revision 3, Section 6.1, states that the criterion for items released from the Restricted Area is, "No detectable licensed activity above background." On both August 18, 2000, and October 31, 2001, the licensee identified an example in which detectable radioactive material was inadvertently released from the restricted area. These two events were entered into the licensee's corrective action program as Action Requests AR 000800974 and AR 011001703. The safety significance of this finding was determined to very low by the Public Radiation Safety Significance Determination Process because the public exposure associated with each item was less than 5 millirem and there were fewer than 6 events.

Inspection Report# : [2002003\(pdf\)](#)

Public Radiation Safety

Physical Protection

Significance: N/A Nov 15, 2002

Identified By: NRC

Item Type: FIN Finding

Verification of Compliance With Interim Compensatory Measures Order

On February 25, 2002, NRC imposed by Order Interim Compensatory Measures that addressed waterborne threats, vehicle bombs, insider threats, land-based assaults, and mitigative measures. The inspectors determined that, overall, the licensee appropriately: evaluated the impact of the interim design basis explosive on the site; incorporated the Interim Compensatory Measures into the site protective strategy and access authorization program; developed and implemented relevant procedures; evaluated the impact of losses of large areas of the site and vulnerabilities of their computer systems; ensured that the emergency plan could be implemented; and established and effectively coordinated interface agreements with offsite organizations.

Inspection Report# : [2002013\(pdf\)](#)

Miscellaneous

Last modified : March 25, 2003