

# San Onofre 3

## 4Q/2012 Plant Inspection Findings

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### Initiating Events

**Significance:**  Mar 24, 2012

Identified By: Self-Revealing

Item Type: NCV NonCited Violation

#### **Failure to Control Work Activities and Prevent RCS Perturbations**

The inspectors reviewed a self-revealing non-cited violation of Technical Specification 5.5.1.1 for the failure of operations personnel to follow Procedure SO23-3-1.8, "Draining the Reactor Coolant System to a Reduced Inventory Condition," Revision 32, Attachment 13, "Reduced Inventory Condition RCS Perturbation Control." Specifically, on February 8, 2012, operations personnel failed to document potential reactor coolant system perturbations and the measures, controls, and enhanced monitoring used to prevent perturbations. Consequently, work activities performed by health physics personnel were not appropriately documented and controlled which resulted in a reactor coolant system perturbation while in reduced inventory conditions. The issue was entered into licensee's corrective action program as Nuclear Notification NN 201848706.

The performance deficiency is more than minor, and therefore a finding, because it was associated with the Initiating Events Cornerstone attribute of configuration control and affected the associated cornerstone objective to limit the likelihood of those events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Additionally, the failure to appropriately control work activities that could impact reactor coolant system inventory while in reduced inventory conditions, if left uncorrected, would have the potential to lead to a more significant safety concern. Using the Manual Chapter 0609, Appendix G, "Shutdown Operations Significance Determination Process," Phase 1 guidance, a Phase 2 analysis is required because the finding increased the likelihood of a loss of reactor coolant system inventory during reduced inventory conditions as a result of inadequate controls implemented to avoid operations that could lead to perturbations in reactor coolant system level control. The finding was evaluated using the Phase 2 guidance in IMC 0609, Appendix G, as applied to Worksheet 2. Using the applicable tables and accounting for the availability of mitigating equipment, two sequences of value 8 and 9, respectively, were identified. This resulted in a determination of very low significance (Green). This finding has a cross-cutting aspect in the area of human performance associated with the work control component because health physics personnel failed to appropriately communicate and coordinate work activities with operations personnel to ensure there would be no impact to plant operations [H.3(b)](Section 1R20).

Inspection Report# : [2012002](#) (*pdf*)

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### Mitigating Systems

**Significance:**  Dec 31, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Provide Complete and Accurate Information Regarding Auxiliary Feedwater Operation System Operability**

The inspectors identified a Severity Level IV noncited violation of 10 CFR 50.9, "Completeness and Accuracy of Information," for the failure of the licensee to provide complete and accurate information in all material respects in operability and reportability review supporting documents. Specifically, on September 29, 2011, the licensee did not provide information that was complete and accurate in all material respects, in that Evaluation Report FAI/11-0655, "Evaluation of Potential Cooling of the SONGS Steam Line for the AFW Turbine," used inaccurate information to inappropriately determine that the turbine-driven auxiliary feedwater pump was operable, the condition was not

reportable per the requirements of 10 CFR 50.73, and the compensatory measures implemented on May 5, 2011, could be removed. The compensatory measures were improperly removed on October 27, 2011. This violation has been entered into the licensee's corrective action program as Nuclear Notification NN 202280026.

The failure of the licensee to provide complete and accurate information related to the operability of the AFW system was a performance deficiency. The significance determination process is not suited to assess the significance of a violation of 10 CFR 50.9 because it affected the ability of the NRC to perform its regulatory oversight function and, as such, it was assessed using traditional enforcement. This violation was determined to be a Severity Level IV violation based on NRC Enforcement Policy examples provided in Section 6.9. No crosscutting aspect was assigned because the performance deficiency was assessed using traditional enforcement (Section 40A3).

Inspection Report# : [2012005](#) (*pdf*)

**Significance:**  Aug 16, 2010

Identified By: NRC

Item Type: VIO Violation

### **Failure to Ensure At Least One Train of Equipment Necessary to Achieve Hot Shutdown Conditions Is Free of Fire Damage**

The team identified a cited violation of License Condition 2.C(14), "Fire Protection," for failure to correct a noncompliance. Specifically, Inspection Report 05000361;362/2007008 documented a noncompliance involving the failure to ensure that at least one train of safe shutdown equipment would remain free from fire damage in each fire area. The NRC exercised discretion not to cite this violation at that time because the licensee met the criteria described in Enforcement Guidance Memorandum 98-002, Revision 2, and Supplement 2 to that revision. Enforcement Guidance Memorandum 07-004 superseded Enforcement Guidance Memorandum 98-002 and required licensees to complete corrective actions for noncompliances related to post-fire operator manual actions by March 6, 2009. This violation is being cited due to the failure to complete corrective actions and restore compliance within the required time. This finding was entered into the licensee's corrective action program as Notification NN 200940265.

The failure to promptly restore adequate fire protection and/or separation of required safe shutdown systems was a performance deficiency. This performance deficiency was more than minor because it was associated with the protection against external factors (fire) attribute of the Mitigating Systems Cornerstone and adversely affected the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events in order to prevent undesirable consequences. Because the violation involved multiple fire areas, the team could not evaluate this issue using Phase 2 of Inspection Manual Chapter 0609, Appendix F, and a Phase 3 significance determination process risk assessment was performed by a senior reactor analyst. The finding was determined to have very low risk significance (Green), with a delta-CDF of 3.2E-8/yr, because of a combination of the availability of long recovery times for feasible operator manual actions and low-probability fire damage scenarios in the nine fire areas with fire sources which could potentially damage cables of required safe shutdown components. This finding involved a cross-cutting aspect in the decision-making component in the human performance area because the licensee failed to make a risk-significant decision using a systematic process when considering the scheduling of corrective actions.

Inspection Report# : [2010007](#) (*pdf*)

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## **Barrier Integrity**

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## **Emergency Preparedness**

**Significance:**  Sep 23, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Correct Drill Performance Weaknesses**

The inspectors identified a non-cited violation of 10 CFR 50.47(b)(14) for failure to correct weakness or deficiencies

that are identified in formal critiques of drills or exercises. The licensee did not take corrective actions for fourteen weaknesses in site assembly and evacuation, tracking of non-licensed operators, and provision of radiation protection to non-licensed operators, identified in critiques between September 2010 and June 2012. The failure to correct weaknesses identified in drills and exercises was a performance deficiency within the licensee's control. This failure has been entered into the licensee's corrective action program as Nuclear Notifications NNs 201974817, 201811829, and 201645589

This finding is more than minor because it affected the emergency response organization cornerstone attribute. The finding was evaluated using the Emergency Preparedness Significance Determination Process and determined to be of very low safety significance because it was a failure to comply and was not a loss of planning standard function. The finding was not a loss of planning standard function because the weaknesses that were not corrected were not associated with risk significant planning standards. This finding was assigned a corrective action cross-cutting aspect because San Onofre did not take corrective actions for numerous drill weaknesses in a timely manner commensurate with their safety significance [P.1(d)] (Section 1EP5).

Inspection Report# : [2012004](#) (*pdf*)

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## Occupational Radiation Safety

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### Public Radiation Safety

**Significance:**  Sep 23, 2012

Identified By: NRC

Item Type: NCV NonCited Violation

#### **Failure to Update the Final Safety Analysis Report for Solid Radioactive Waste**

The inspectors identified a Severity Level IV, non-cited violation of 10 CFR 50.71, "Maintenance of Records, Making of Reports," paragraph (e) which states, in part, "Each person licensed to operate a nuclear power reactor shall update periodically, the final safety analysis report originally submitted as part of the application for the license, to assure that the information included in the report contains the latest information developed." Contrary to the above, from 1985 to June 2012, the licensee failed to update the Final Safety Analysis Report to assure that the information included in the report contains the latest information developed. Specifically, since its construction in 1985, the licensee stored a significant source of radioactivity in the Multi-Purpose Handling Facility (South Yard Storage Facility), but failed to describe the source, volume, and storage of radioactive equipment in the Final Safety Analysis Report. The licensee has entered this violation into their corrective action program as Nuclear Notification NN 202076593.

The inspectors determined that the failure to update the Final Safety Analysis Report as required by 10 CFR 50.71(e), "Maintenance of Records, Making of Reports" is a performance deficiency. This performance deficiency was dispositioned using traditional enforcement because failing to update a Final Safety Analysis Report had the potential to adversely impact the NRC's ability to perform its regulatory function. The performance deficiency is characterized as a Severity Level IV violation in accordance with the NRC Enforcement Policy, Section 6.1.d.3. Since this issue was dispositioned using traditional enforcement, there is no cross-cutting aspect (Section 2RS08).

Inspection Report# : [2012004](#) (*pdf*)

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## Security

Although the Security Cornerstone is included in the Reactor Oversight Process assessment program, the Commission has decided that specific information related to findings and performance indicators pertaining to the Security Cornerstone will not be publicly available to ensure that security information is not provided to a possible adversary. Other than the fact that a finding or performance indicator is Green or Greater-Than-Green, security related information will not be displayed on the public web page. Therefore, the [cover letters](#) to security inspection reports may be viewed.

## Miscellaneous

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