



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

March 2, 2010

Mr. Ross T. Ridenoure  
Senior Vice President and  
Chief Nuclear Officer  
Southern California Edison Company  
San Onofre Nuclear Generating Station  
P.O. Box 128  
San Clemente, CA 92674-0128

**SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION – NRC FOCUSED  
BASELINE INSPECTION OF SUBSTANTIVE CROSS-CUTTING ISSUES  
INSPECTION REPORT 05000361/2009009 and 05000362/2009009**

Dear Mr. Ridenoure:

On February 10, 2009, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at the Southern California Edison's San Onofre Nuclear Generating Station, Units 2 and 3 Facility. The enclosed inspection report documents the inspection findings, which were discussed on November 20, 2009, February 3, 2010, and March 2, 2010, with you, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

The inspectors reviewed your progress associated with the open substantive cross-cutting issues in human performance and problem identification and resolution. The Mid-Cycle Performance Review Letter, dated September 1, 2009, was the fourth consecutive cycle where substantive cross-cutting issues were identified in human performance and problem identification and resolution. In the Mid-Cycle Letter, within the human performance cross-cutting area, the NRC identified an additional theme in the component of decision-making associated with the failure to use conservative assumptions. Your staff responded to the open substantive cross-cutting issues in letters titled, "Response to Annual Assessment Letter Inspection Report 05000361/2009001, 05000362/2009001," dated April 21, 2009, and "Response to Mid-Cycle Performance Review Letter for the San Onofre Nuclear Generating Station," dated October 30, 2009, with the status of corrective actions planned to address the human performance and problem identification and resolution cross-cutting issues, including schedules, milestones, and performance monitoring metrics. The inspectors reviewed the human performance and problem identification and resolution improvement plans. The inspectors reviewed the recently developed root cause evaluation for the additional theme identified in the human performance cross-cutting area. The inspectors concluded that the

recently developed root cause evaluation was narrowly focused, and the corrective actions from the evaluation did not fully address the performance issues. The inspectors could not assess the effectiveness of the corrective actions because you were in the early stages of implementation of the improvement plans.

During the week of November 16, 2009, the inspectors reviewed your independent safety culture survey results and performed eleven safety culture focus group interviews of over 100 site workers. From February 1-10, 2010, a second inspection team performed forty additional group interviews of almost 400 site workers in order to better understand the safety culture at the plant. The inspection teams identified common themes from worker statements, but did not attempt to validate worker perceptions due to the limited scope of the inspection. Through review of concerns the inspectors received from your staff and the NRC facilitated focus group discussions, the NRC determined that the availability of avenues for raising safety concerns has been reduced. This has developed due to several factors, which include: (1) the difficulty or inability to use the corrective action program; (2) the lack of knowledge of the Nuclear Safety Concerns Program; and (3) the perceived fear of retaliation for raising concerns to the NRC. The impact of a decreased availability of avenues to raise safety concerns is further impacted by internal communication issues and an apparent inconsistent understanding of expectations and standards. Since all managers have not completed Safety Conscious Work Environment training, and the Southern California Edison's communications and policy statements do not clearly reflect the availability of different avenues for raising safety concerns, the NRC concluded that full alignment has not been achieved within the first-line supervisor and mid-level management ranks regarding support of site-wide efforts to improve the Safety Conscious Work Environment at San Onofre Nuclear Generating Station.

The inspectors noted that many focus group participants also discussed continuing problems in human performance and use of the corrective action program. These perceptions were consistent with NRC's findings and indicate that corrective actions to address long-standing substantive cross-cutting issues have been ineffective.

This report documents two NRC identified findings of very low safety significance (Green). These findings were determined to involve violations of NRC requirements. However, because of the very low safety significance and because they were entered into your corrective action program, the NRC is treating these findings as non-cited violations, consistent with Section VI.A.1 of the NRC Enforcement Policy. If you contest the violations or the significance of the non-cited violations, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with copies to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, 612 E. Lamar Blvd, Suite 400, Arlington, Texas, 76011-4125; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001; and the NRC Resident Inspector at the San Onofre Nuclear Generating Station facility. In addition, if you disagree with the characterization of any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region IV, and the NRC Resident Inspector at San Onofre Nuclear Generating Station. The information you provide will be considered in accordance with Inspection Manual Chapter 0305.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, and its enclosure, will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's document system (ADAMS).

ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Ryan E. Lantz, Chief  
Project Branch D  
Division of Reactor Projects

Dockets: 50-361, 50-362  
Licenses: NPF-10, NPF-15

Enclosures:

- (1) NRC Inspection Report 05000361/2009009 and 05000362/2009009  
w/Attachment: Supplemental Information
- (2) Request for Information

Distribution:

cc w/Enclosure:  
Chairman, Board of Supervisors  
County of San Diego  
1600 Pacific Highway, Room 335  
San Diego, CA 92101

Gary L. Nolff  
Assistant Director-Resources  
City of Riverside  
3900 Main Street  
Riverside, CA 92522

Mark L. Parsons  
Deputy City Attorney  
City of Riverside  
3900 Main Street  
Riverside, CA 92522

Gary H. Yamamoto, P.E., Chief  
Division of Drinking Water and  
Environmental Management  
1616 Capitol Avenue, MS 7400  
P.O. Box 997377  
Sacramento, CA 95899-7377

Michael J. DeMarco  
San Onofre Liaison  
San Diego Gas & Electric Company  
8315 Century Park Ct. CP21C  
San Diego, CA 92123-1548

Director, Radiological Health Branch  
State Department of Health Services  
P.O. Box 997414 (MS 7610)  
Sacramento, CA 95899-7414

Mayor  
City of San Clemente  
100 Avenida Presidio  
San Clemente, CA 92672

James D. Boyd, Commissioner  
California Energy Commission  
1516 Ninth Street (MS 34)  
Sacramento, CA 95814

Douglas K. Porter, Esq.  
Southern California Edison Company  
2244 Walnut Grove Avenue  
Rosemead, CA 91770

Albert R. Hochevar  
Southern California Edison Company  
San Onofre Nuclear Generating Station  
P.O. Box 128  
San Clemente, CA 92675

R. St. Onge  
Southern California Edison Company  
San Onofre Nuclear Generating Station  
P.O. Box 128  
San Clemente, CA 92674-0128

Mr. Steve Hsu  
Department of Health Services  
Radiologic Health Branch  
MS 7610, P.O. Box 997414  
Sacramento, CA 95899-7414

Chief, Technological Hazards Branch  
FEMA Region IX  
1111 Broadway, Suite 1200  
Oakland, CA 94607-4052

Electronic distribution by RIV:  
 Regional Administrator (Elmo.Collins@nrc.gov)  
 Deputy Regional Administrator (Chuck.Casto@nrc.gov)  
 DRP Director (Dwight.Chamberlain@nrc.gov)  
 DRP Deputy Director (Anton.Vegel@nrc.gov)  
 DRS Director (Roy.Caniano@nrc.gov)  
 DRS Deputy Director (Troy.Pruett@nrc.gov)  
 Senior Resident Inspector (Greg.Warnick@nrc.gov)  
 Resident Inspector (John.Reynoso@nrc.gov)  
 Branch Chief, DRP/D (Ryan.Lantz@nrc.gov)  
 Senior Project Engineer, DRP/D (Don.Allen@nrc.gov)  
 Project Manager (Randy.Hall@nrc.gov)  
 Site Secretary (Heather.Hutchinson@nrc.gov)  
 Public Affairs Officer (Victor.Dricks@nrc.gov)  
 Public Affairs Officer (Lara.Uselding@nrc.gov)  
 State Liaison Officer (Bill.Maier@nrc.gov)  
 Branch Chief, DRS/TSB (Mike.Hay@nrc.gov)  
 RITS Coordinator (Marisa.Herrera@nrc.gov)  
 Regional Counsel (Karla.Fuller@nrc.gov)  
 Congressional Affairs Officer (Jenny.Weil@nrc.gov)  
 OEmail Resource  
 ROPreports  
 DRS/TSB STA (Dale.Powers@nrc.gov)  
 OEDO RIV Coordinator (Leigh.Trocine@nrc.gov)  
 ACES (Ray.Kellar@nrc.gov)  
 Office of Enforcement (Roy.Zimmerman@nrc.gov)  
 Regional Counsel (Karla.Fuller@nrc.gov)  
 RidsOeMailCenter

File located: R:\\_REACTORS\\_SONGS\2009\SO 2009-009RP-MPC.doc

SUNSI Rev Compl.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ADAMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reviewer Initials	RL
Publicly Avail	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	RL
RI:DRP/D	SRI:DRS/PSB2	SOE:DRS/OB	SRI:DRP/D	SPE:DRP/D	
MCatts	JDrake	COsterholtz	GWarnick	DAllen	
/RA/	/RA/	/RA/	/RA/	/RA/	
2/25/10	2/25/10	2/25/10	2/26/10	2/25/10	
E:DRS/OB	I:DRS	SE:DRS/OB	SHP:DRS/TSB	C:DRP/D	
TPate	AFairbanks	SGarchow	MVasquez	RLantz	
/RA/	/RA/	/RA/	/RA/	/RA/	
2/26/10	2/25/10	2/25/10	2/25/10	2/26/10	

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

**U.S. NUCLEAR REGULATORY COMMISSION**

**REGION IV**

Docket: 50-361, 50-362

License: NPF-10, NPF-15

Report: 05000361/2009009 and 05000362/2009009

Licensee: Southern California Edison Co. (SCE)

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

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

Dates: November 16, 2009, through February 10, 2010

Inspectors: M. Catts, Resident Inspector  
J. Drake, Senior Reactor Inspector  
C. Osterholtz, Senior Operations Engineer  
M. Vasquez, Senior Health Physicist  
S. Garchow, Senior Operations Engineer  
T. Pate, Operations Engineer  
A. Fairbanks, Reactor Inspector

Approved By: Ryan E Lantz, Chief  
Project Branch D  
Division of Reactor Projects

## SUMMARY OF FINDINGS

IR 05000361; 05000362/2009009; 11/16/2009 - 2/10/2010; San Onofre Nuclear Generating Station, Units 2 and 3; Focused baseline inspection of substantive cross-cutting issues and safety culture; Problem Identification and Resolution

The inspection was conducted by a resident inspector and six region-based inspectors. Two Green findings of very low safety significance were identified during the inspection. The significance of most findings is indicated by their color (Green, White, Yellow, or Red) using Inspection Manual Chapter 0609, "Significance Determination Process." Findings for which the significance determination process does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### A. NRC-Identified Findings

Cornerstone: Initiating Events

- Green. The inspectors identified a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of training personnel to ensure activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Specifically, between September 27, 2009 and November 17, 2009, training personnel failed to follow Level 1 Quality Assurance Program Affecting Procedure SO123-XXI-1.11.23, "Human Performance Training Program Description," Revision 0, to ensure workers received human performance training before hands-on work was performed in the plant, which resulted in over 80 employees not receiving human performance training and contributed to at least two human performance events. This finding was entered into the licensee's corrective action program as Nuclear Notification NN 200670169.

The finding is greater than minor because, if left uncorrected, the failure to follow procedures to provide human performance training, would have the potential to lead to more significant safety concerns as is evidenced by the two human performance events that occurred by untrained individuals. This finding is associated with the Initiating Events Cornerstone. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program because the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity [P.1(d)] (Section 40A2).

## Cornerstone: Mitigating Systems

- Green. The inspectors identified a non-cited violation of Technical Specification 5.5.1, "Procedures," for the failure of procedure writer personnel to maintain written procedures covered in Regulatory Guide 1.33. Specifically, from initial plant startup of Units 2 and 3 to November 2009, no process requirement or procedure existed to identify procedures that required technical changes so that those procedures could be suspended or put an administrative hold until the required changes were made. This resulted in a quality controlled procedure requiring technical changes available to use on a safety-related system without flagging the required changes. This finding was entered into the licensee's corrective action program as Nuclear Notification NN 200671179.

The finding is greater than minor because, if left uncorrected, the failure to maintain and control procedures would have the potential to lead to a more significant safety concern by having technically inaccurate procedures being used on safety-related systems. This finding is associated with the Mitigating Systems Cornerstone. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding was determined to have a very low safety significance because the finding did not result in a loss of a system safety function, an actual loss of safety function of a single train for greater than its technical specification allowed outage time, or screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program because problems were not thoroughly evaluated such that the resolutions addressed the causes and extent of conditions. This includes properly classifying and prioritizing conditions adverse to quality [P.1(c)] (Section 4OA2).

### **B. Licensee-Identified Violations**

None

## REPORT DETAILS

### 4. OTHER ACTIVITIES

#### 40A2 Problem Identification and Resolution (71152)

The team based the following conclusions, in part, on a review of issues that were identified in the assessment period, which ranged from June 5, 2009, (the last focused baseline inspection) to the end of the on-site portion of the inspection on February 10, 2010.

##### .1 Substantive Cross-cutting Issues

In the 2007 Annual Assessment Letter for San Onofre Nuclear Generating Station, dated March 3, 2008, (ADAMS ML080630244) the NRC identified substantive cross-cutting issues associated with human performance involving procedure adequacy and problem identification and resolution involving the licensee's failure to thoroughly evaluate problems such that resolutions address causes and extent of conditions.

In the 2008 Annual Assessment Letter, dated March 4, 2009, (ADAMS ML090640307) the NRC documented that this was the third cycle where substantive cross-cutting issues were identified in human performance and problem identification and resolution. Additionally, during the 2008 assessment period, the NRC identified an additional substantive cross-cutting issue in the area of human performance involving ineffective use of human error prevention techniques. The licensee responded to the open substantive cross-cutting issues in a letter titled, "Response to Annual Assessment Letter Inspection Report 05000361/2009001; 05000362/2009001," dated April 21, 2009, with the status of corrective actions planned to address the human performance and problem identification and resolution cross-cutting issues, including schedules, milestones, and performance monitoring metrics. During the 2009 mid-cycle assessment period, the NRC identified an additional substantive cross-cutting issue in the area of non-conservative decision-making. The licensee provided an additional response to the open substantive cross-cutting issues in a letter titled, "Response to Mid-Cycle Performance Review Letter for the San Onofre Nuclear Generating Station," dated October 30, 2009, with the status of corrective actions planned to address the human performance and problem identification and resolution cross-cutting issues, including schedules, milestones, and performance monitoring metrics.

##### a. Inspection Scope

The inspectors reviewed the progress associated with the open substantive cross-cutting issues in human performance and problem identification and resolution. The inspectors considered the following during the review of the licensee's actions: (1) the substantive cross-cutting issues improvement plans, including the root cause evaluations; that the planned corrective actions address the root causes; and the schedule and milestones, and (2) the metrics and measures for monitoring improved performance including the effectiveness reviews.

b. Observations and Findings

1. Improvement Plans

The inspectors reviewed the scope of information considered in the root cause evaluations, the details of the evaluations, and the planned corrective actions. These reviews included assessment of the scope and progress of the licensee's procedure improvement efforts and cause evaluation improvement efforts. The inspectors reviewed the root cause for the recently opened substantive cross-cutting issue in human performance non-conservative decision making. The inspectors concluded that the root cause evaluation did not include appropriate information and detail to identify the reasons for the substantive cross-cutting issue. The inspectors determined the identified causes and corrective actions resulting from the evaluation were narrowly focused on operability determinations even though two of the four findings associated with this cross-cutting issue did not involve operability determinations as a direct contributor. The licensee wrote Nuclear Notification NN 200694047 to address this issue and is revising the root cause evaluation. Because the licensee was in the early stages of implementing their improvement plans, the inspectors were unable to assess and evaluate the effectiveness of the corrective action plans for any of the substantive cross-cutting issues.

2. Metrics and Measures to Monitor Improvement

During the inspection, the licensee was still in the process of finalizing and implementing the metrics to monitor improvement. The licensee established seven metrics to monitor the effectiveness of the corrective actions addressing the human performance substantive cross-cutting issue. These metrics included: Station Event Rate, Division Event Rate, Written Instruction Quality Count, Written Instruction Use Errors, Leadership Engagements, Industrial Safety Accident Rate, and Occupational Safety and Health Administration Safety Accident Rates. The licensee established nine metrics to monitor the effectiveness of the corrective actions addressing the problem identification and resolution substantive cross-cutting issue. These metrics included: Notifications Generated and Open, Corrective Actions to Prevent Recurrence Open and Open greater than 180 Days, Cause Evaluation Corrective Actions Open and Percent Overdue, Corrective Actions Open and Percent Overdue, Average Time to Perform Cause Evaluations, Cause Evaluation Quality, Notifications and Work Orders Greater Than 2 Years Backlog/Workoff, Closure Review Results, and Operability Determination Quality.

The licensee determined that some of these metrics needed to be revised or were not effective at measuring improvement including Division Event Rate, Written Instruction Quality Count, Written Instruction Use Errors, Cause Evaluation Quality, and Operability Determination Quality Metric.

The inspectors identified issues with some of licensee's metrics including:

- Notifications Generated and Notifications Opened – The inspectors determined this metric is not comparing consistent data. The licensee

includes all notifications generated onsite in the Notifications Generated trend; however, the licensee does not include all notifications open in the Notifications Opened trend. The licensee removed notifications associated with broke fix equipment issues in the Notifications Opened population, so the metrics were not comparing consistent data. The licensee wrote Nuclear Notification NN 200668551 to address this issue.

- Notifications and Work Orders Greater Than 2 Years Backlog/Workoff – The inspectors determined that the letter to the NRC, dated October 30, 2009, stated that performance goals and thresholds have been established for each metric; however, the inspectors determined that this metric did not include performance goals or thresholds. The licensee wrote a Nuclear Notification NN 200667711 to address this issue.

The inspectors determined that not all metrics had been fully implemented, and that not enough time had passed to assess trends or determine the appropriateness of the goals and thresholds.

The inspectors reviewed the three effectiveness reviews the licensee performed for the corrective actions to preclude repetition of the human performance substantive cross-cutting issues. The three effectiveness reviews determined that the corrective actions taken were ineffective. Since effectiveness reviews for the other corrective actions to preclude repetition have not been completed, the inspectors determined not enough time had passed to determine if the other corrective actions would be effective.

### 3. Failure to Follow a Level 1 Quality Assurance Program Affecting Human Performance Procedure

Introduction. The inspectors identified a Green non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure of the training personnel to follow Level 1 Quality Assurance Program Affecting Procedure SO123-XXI-1.11.23, "Human Performance Training Program Description," Revision 0, to ensure workers received human performance training before hands-on work was performed in the plant, which resulted in over 80 employees not receiving human performance training and contributed to at least two human performance events.

Description. The licensee's Root Cause Evaluation 800257053 for human performance problems identified the need for training to address the NRC identified cross-cutting aspects in human performance. The root cause created corrective actions focused on developing and completing training for station personnel using Dynamic Learning Activities on use of human performance tools. The licensee determined that some of the corrective actions would not be fully implemented before the Unit 2 refueling outage starting September 27, 2009, and that interim actions would be needed to ensure Southern California Edison and contract outage workers had received the human performance training prior to the refueling outage start. The licensee identified these interim actions in letters "Response to Annual Assessment Letter Inspection Report 05000361/2009001, 05000362/2009001," dated April 21, 2009, and "Response to Mid-Cycle

Performance Review Letter for the San Onofre Nuclear Generating Station," dated October 30, 2009, which contained the two actions, "Human Performance Training Implementation – Train and qualify SCE hands-on outage workers," and "Human Performance Training Implementation – Train supplemental (contractor) outage workers."

On November 17, 2009, the inspectors asked the licensee for objective evidence that human performance training had been given to hands-on SCE and contract outage workers. The licensee believed the human performance training was tied to plant access; however, there was no control in place to ensure a worker received the training when they were granted access to the plant. The licensee determined that no metric or reporting tool tracked this training to ensure all hands-on workers received the training. Due to the inspectors' questions, the licensee determined they had not fully implemented the interim corrective actions and determined that 80 SCE and contract workers had not received the required human performance training before performing hands-on work.

The licensee wrote Nuclear Notification NN 200670169 to create a reporting tool to ensure all new employees and contract workers receive human performance training before performing hands-on work in the plant, and to develop interim actions to ensure all current workers had received the training. The interim actions included prohibiting the 80 workers to perform any additional hands-on work in the plant until they completed the required human performance training. Further, the licensee put out a site wide communication and expectation that supervisors validate human performance training is complete before allowing the workers to perform hands-on duties.

The inspectors asked what recent human performance events had been linked to outage workers that had not received the human performance training. The licensee determined two events were a result of SCE and contract workers not receiving the human performance training. On October 25, 2009, a Human Performance Station Clock Reset occurred when a foreman, who had not received the human performance training, oversaw a job where human performance tools were not used, and one of his workers inadvertently cut into a pressurized instrument air line. The licensee wrote Nuclear Notifications NNs 200638917 and 200674634 to address this issue. On October 10, 2009, a personnel injury from a hand held grinder occurred when a contract employee who had not received the human performance training, defeated the safety feature on the grinder. The licensee wrote Nuclear Notifications NNs 200618821 and 200674454 to address this issue. The licensee also generated Nuclear Notification NN 200690804, which included an Apparent Cause Evaluation for failing to follow the applicable Human Performance Training procedure.

Analysis. The failure to follow Level 1 Quality Assurance Program Affecting Procedure SO123-XXI-1.11.23, "Human Performance Training Program Description," Revision 0, to ensure human performance training before hands-on work was performed in the plant was a performance deficiency. The finding is greater than minor because, if left uncorrected, the failure to follow procedures to provide human performance training would have the potential to lead to more significant safety concerns as is demonstrated by the two human performance events that occurred by untrained individuals. This finding is associated with the

Initiating Events Cornerstone. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding is determined to have very low safety significance because the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program because the licensee failed to take appropriate corrective actions to address safety issues and adverse trends in a timely manner, commensurate with their safety significance and complexity [P.1(d)].

Enforcement. 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," requires that activities affecting quality shall be prescribed by instructions, procedures, or drawings, and shall be accomplished in accordance with those instructions, procedures, and drawings. The applicable procedure, Level 1 Quality Assurance Program Affecting Procedure SO123-XXI-1.11.23, "Human Performance Training Program Description," Revision 0, Step 6.1.1 for Initial Training stated, in part, that "The Human Performance Training Program consists of classroom training and Dynamic Learning Activities," for employees and contingent outage workers. Step 6.1.3, "Evaluation" required, in part, that for this training "Written examinations must be passed with a score of 80% or greater." Contrary to the above, between September 27, 2009 and November 17, 2009, training personnel failed to follow Procedure SO123-XXI-1.11.23 to ensure human performance training before hands-on work was performed in the plant. Specifically, 80 SCE and contract employees did not receive human performance training which contributed to at least two human performance events. Because this finding is of very low safety significance and has been entered into the licensee's corrective action program as Nuclear Notification NN 200670169, this violation is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000361; 362/2009009-01, "Failure to Follow a Level 1 Quality Assurance Program Affecting Human Performance Procedure."

4. Failure to Maintain Written Procedures Covered in Regulatory Guide 1.33

Introduction. The inspectors identified a Green non-cited violation of Technical Specification 5.5.1, "Procedures," for the failure of procedure writer personnel to maintain written procedures covered in Regulatory Guide 1.33. This resulted in a quality controlled procedure requiring technical changes available to use on a safety-related system without flagging the required changes.

Description. In December 2008, during a root cause investigation, the licensee identified the backlog of procedure changes required by each department. The licensee identified approximately 1000 operations procedures and 450 maintenance procedures needed revisions. On June 3, 2009, during a NRC Focused Baseline Inspection documented in Inspection Report 05000361; 362/2009003, the inspectors were reviewing the metrics associated with working off the backlog of required procedure changes. The inspectors questioned which procedures were currently being used in the plant, but required changes that could affect plant safety.

The licensee immediately reviewed the backlog of procedure changes for all SCE

organizations. For operations procedures, Guide OPG-1, "Operations Procedure Writer Guide," Revision 19, and for maintenance procedures, Procedure SO123-I-I.10, "Method for Screening and Prioritizing Procedure Change Requests," Revision 10, defined the "TEAM" approach to classifying procedure changes as technical, enhancement, administrative correction, or modification. Technical changes were defined for plant impacting procedures, or procedures that must be issued the next business day, as changes that could place a structure, system, or component in an unevaluated condition; could cause a plant trip; could cause a loss of megawatts; could degrade nuclear safety; could cause unexpected reactivity changes; or could cause an immediate personnel safety issue.

During the inspection in June 2009, the inspectors questioned if operations and maintenance should be using quality controlled procedures for work in the plant without the necessary technical changes being made. Due to the inspectors' questions, the licensee identified 14 operations procedures and 40 maintenance procedures that required technical changes and were still active for use in the plant. The licensee reviewed the procedures that required technical changes for any immediate impact on the plant, stopped any work using those procedures, and developed a process to place those procedures on hold until the technical changes were made. The licensee wrote Nuclear Notification NN 200453351 to address these programmatic procedure change issues and to perform an apparent cause evaluation. There was no safety impact because no procedure changes resulted in any challenges to safe plant operations. The licensee also wrote Nuclear Notification NN 200461070 to review the procedure change backlog for other affected departments. The inspectors identified there were no programmatic controls for maintaining procedures or work orders by placing them on administrative hold until required technical changes were complete. The corrective action program computer system did not include a way to flag procedures requiring technical changes, resulting in procedures and work orders being used without knowledge of required changes. The inspectors determined that the licensee took appropriate corrective actions to identify the backlog of procedure changes in December 2008; however, the licensee did not take appropriate corrective actions to identify which procedures needed technical revisions, and place those procedures on administrative hold until the technical changes were made.

On November 12, 2009, the licensee again identified that a backlog existed and that over 450 procedure changes needed to be classified according to the "TEAM" methodology. The licensee identified Procedure SO23-V-12.2.2, "Surveillance Requirement Core Protection Calculator Channel Calibration and Functional Test," Revision 22, required a more restrictive acceptance criteria for a power supply, and the technical change was made promptly. The inspectors performed a Focused Baseline Inspection in November 2009. The inspectors determined that the licensee followed their process to properly classify procedure changes once procedure changes were identified; however, the licensee was not identifying all procedures that required changes. The inspectors determined the licensee took appropriate corrective actions to classify the 450 SCE procedures and put the one safety-related procedure on hold; however, after the NRC finding from June 2009, and even after identifying the 450 SCE procedures that needed classification, the licensee did not take appropriate actions to put in place a

process to identify which procedures needed technical changes to ensure those procedures were not available for use on safety-related plant equipment.

Analysis. The failure to maintain SCE procedures covered by Regulatory Guide 1.33 was a performance deficiency. The finding is greater than minor because, if left uncorrected, the failure to maintain and control procedures would have the potential to lead to a more significant safety concern by having technically inaccurate procedures being used on safety-related systems. This finding is associated with the Mitigating Systems Cornerstone. Using Manual Chapter 0609.04, "Phase 1 – Initial Screening and Characterization of Findings," the finding was determined to have a very low safety significance because the finding did not result in a loss of a system safety function, an actual loss of safety function of a single train for greater than its technical specification allowed outage time, or screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event. The finding has a cross-cutting aspect in the area of problem identification and resolution associated with the corrective action program because problems were not thoroughly evaluated such that the resolutions addressed the causes and extent of conditions. This includes properly classifying and prioritizing conditions adverse to quality [P.1(c)].

Enforcement. Technical Specification 5.5.1. requires, in part, that written procedures be established, implemented, and maintained covering the activities specified in Appendix A, "Typical Procedures for Pressurized Water Reactors and Boiling Water Reactors," of Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operations)," dated February 1978. Regulatory Guide 1.33, Appendix A, describes safety-related activities that should be covered by procedures. Contrary to the above, from initial plant startup of Units 2 and 3 to November 2009, no process requirement or procedure existed to identify procedures that required technical changes so that those procedures could be suspended or put an administrative hold until the required changes were made. This resulted in quality controlled Procedure SO23-V-12.2.2, "Surveillance Requirement Core Protection Calculator Channel Calibration and Functional Test," Revision 22, available to use on a safety-related system without flagging the required changes. Because this finding is of very low safety significance and has been entered into the licensee's corrective action program as Nuclear Notification NN 200671179, this violation is being treated as a non-cited violation, consistent with Section VI.A of the NRC Enforcement Policy: NCV 05000361; 362/2009009-02, "Failure to Maintain Written Procedures Covered in Regulatory Guide 1.33."

## .2 Safety Conscious Work Environment (SCWE) Assessment

### a. Inspection Scope

During the week of November 16, 2009, the inspection team conducted eleven focus group interview sessions involving 102 personnel. The interviewees represented various functional organizations and ranged across both contractors and staff. The team conducted these interviews to assess whether conditions existed that would challenge the establishment of a safety conscious work environment at SONGS. In addition, the team reviewed the 2009 Nuclear Safety Culture Assessment and discussed the results and associated action plans with

key owners. The team interviewed the manager responsible for the Nuclear Safety Concerns Program. Finally, the team reviewed the programs and processes for establishing, maintaining, and assessing safety culture.

b. Observations and Findings

No findings of significance were identified.

All of the individuals interviewed expressed a willingness to raise safety concerns and were able to provide multiple examples of avenues available, such as their supervisor, writing a notification, other supervisors/managers, or the Nuclear Safety Concerns Program. However, approximately 25 percent of those interviewed indicated that they perceived that individuals would be retaliated against if they went to the NRC with a safety concern if they were not satisfied with their management's response.

Across the board, all of the interviewees provided negative feedback and shared concerns about their working knowledge of Systems Applications and Products (SAP), which includes the site's corrective action program system. Many interviewees indicated that they either did not know how to write a notification or found the process to be very difficult. Regarding training on the new system, all the interviewees explained that either they did not receive any, or the training they received was of limited effectiveness. Some of the feedback regarding the SAP training indicated that the trainers were not very knowledgeable and that it was less effective because it was not presented in a hands-on format. The interviewees provided examples of current workaround practices such as going directly to their supervisors or other individuals with safety issues instead of entering them into the system. There was general concern expressed by all the interviewees about not feeling comfortable using SAP for all the tasks needed for their specific job functions. This deficiency was previously identified in the Problem Identification and Resolution inspection performed by the NRC in August 2008 documented in NRC Inspection Report 05000361; 362/2008012.

Regarding the Nuclear Safety Concerns Program, approximately half of the participants interviewed (mostly contract personnel) were unaware it existed or how to use it. The remaining personnel interviewed had little or no experience using the Nuclear Safety Concerns Program, but indicated they would use the Nuclear Safety Concerns Program if necessary. The inspectors reviewed the Nuclear Safety Concerns Program metrics to determine the rate SCE employees and contractors were using the Nuclear Safety Concerns Program compared to the NRC's Allegation Program. The inspectors determined the metric compared all concerns received through the Nuclear Safety Concerns Program including equal employment opportunity issues and other non-nuclear safety related concerns to the number of nuclear safety concerns received by the NRC. Since this metric did not compare consistent data between the Nuclear Safety Concerns Program and the NRC's Allegation Program, the inspectors could not determine the licensee's program use and effectiveness. The licensee wrote a Nuclear Notification NN 200677259 to address this issue.

Regarding effectiveness of problem resolution, multiple interviewees in most of the focus groups indicated that obtaining feedback on notifications was difficult,

and that in some cases notifications on the same issue had to be generated multiple times in order for the problem to be addressed and corrected.

The majority of personnel interviewed indicated that pre-job briefs were among the most effective tools for them to perform their job safely. However, approximately two thirds of the personnel interviewed indicated that the "blue book" that licensee management requires all employees to carry on their person, was not an effective tool for them to perform their job. These participants indicated that the blue book was too large and contained too much extra information to be effective.

When asked about the 2009 Nuclear Safety Culture Assessment, all of the individuals interviewed remembered having attended a briefing session on the results. However, no one interviewed could recall any specifics of the results other than "safety culture was adequate." Many personnel also expressed a concern that there was a perception that participation in the survey was mandatory; in that they were assigned to attend a "required" meeting, and then told at that meeting they could "voluntarily" complete the safety culture survey.

Most of the interviewees indicated that communications both in their department and between departments could be improved, especially weekly critique meetings. In addition, about half of those personnel interviewed indicated that procedures in place had confusing or inadequate steps, but that the enhancement rate was improving.

The team also reviewed SCE's programs and processes for establishing, maintaining, and assessing Safety Conscious Work Environment, including:

- (1) SCWE policy statements: SCE documented expectations for management behavior to encourage employees to raise concerns, unrestricted access to multiple avenues for raising concerns, and prohibitions on retaliation in Directive D-008, "SONGS Safety Conscious Work Environment and Resolution of Nuclear Safety Concerns" Revision 11; Directive D-003, "Nuclear Safety Culture," Revision 2; and Brochures "What is a Safety Conscious Work Environment," "What is a Nuclear Safety Concern," and "Our Commitment to a Safety Conscious Work Environment." The inspectors noted that Directive D-008 and Brochure "Our Commitment to a Safety Conscious Work Environment" directed SCE employees to report safety concerns by writing a Nuclear Notification in the Corrective Action Program, contacting supervision, by contacting the Nuclear Safety Concerns Program, or by going to the NRC. However, for contract workers, SCE documents directed them to raise safety concerns to their employer or to SCE management, but did not direct them to contact the NRC or the Nuclear Safety Concerns Program if desired. The licensee wrote Nuclear Notification NN 200756258 to address this issue.
- (2) SCWE communications: Management expectations for SCWE were issued in January 2009, November 2009, December 2009, and January 2010. The inspectors noted these communications described the SCWE policies accurately; however, there were inconsistencies in the information provided. Contract workers, for example, were directed to raise safety concerns to their

employer or to SCE management, and were not directed to contact the NRC or the Nuclear Safety Concerns Program if desired. The Weekly Standup Package stated to go to the NRC if you have not had your nuclear safety issue resolved, implying that going to the NRC is only an option after other avenues have been attempted. The licensee wrote Nuclear Notification NN 200756258 to address this issue.

- (3) SCWE training: In November 2009 the inspectors identified that not all managers received the SCWE management training; only managers enrolled in the Management and Supervisory Development Program received the training, and this was optional and at the discretion of the office Director. Southern California Edison plans on incorporating this training into the Leadership Academy that starts at the end of February 2010, but training will not be completed for all managers until February 2013. Further, SCE had no action or plan to make SCWE management training continuing training. The licensee wrote Nuclear Notifications NNs 200760103, 200759892, 200772287, and 200709479 to address these issues.
- (4) Corrective Action Program: Procedure SO123-XV-50.CAP-1, "Writing Nuclear Notifications for Problem Identification and Resolution," Revision 2, stated, "All SONGS employees and supplemental personnel are responsible for promptly identifying, reporting and documenting problems by writing a Nuclear Notification;" however, not all SCE and contract personnel had access to write a Nuclear Notification. The licensee wrote Nuclear Notification NN 200709479 to address this issue.

The NRC concluded that the availability of avenues for raising safety concerns has been reduced. This has developed due to several factors, which include: (1) the difficulty or inability to use the corrective action program; (2) the lack of knowledge of the Nuclear Safety Concerns Program; and (3) the perceived fear of retaliation among some employees for raising concerns to the NRC. The impact of a decreased availability of avenues to raise safety concerns is further impacted by internal communication issues resulting in an apparent inconsistent understanding of expectations and standards. Since all SCE managers have not completed SCWE training, and the SCE communications and policy statements do not clearly reflect the availability of different avenues for raising safety concerns for all personnel, the inspectors determined that full alignment has not been achieved within the first-line supervisor and mid-level management ranks regarding support of site-wide efforts to improve the SCWE at SONGS.

### .3 Safety Culture Focus Groups

#### a. Inspection Scope

From February 1 – 10, 2010, the NRC facilitated 40 focus group interviews to assess the safety culture at the plant. These discussions involved about 390 workers and included both contract and SCE employees. Two of the focus groups involved about 20 supervisors. Participants were randomly selected from across the organization and were involved in regulated activities at the site. Questions focused on understanding workers' perceptions on all three major areas of safety culture: Human Performance, Problem Identification and

Resolution, and Safety Conscious Work Environment. The inspection team identified common themes from worker statements, but did not attempt to validate worker perceptions due to the limited scope of the inspection.

b. Observations and Findings

Human Performance

Participants consistently articulated frustration over the quality of procedures. Procedures were confusing, cumbersome, sometimes conflicting, and complicated such that they were very difficult to follow without unintentionally violating one procedure or another. Corrective actions were developed by adding steps to procedures; and many procedure changes were made at the last minute without proper validation. Procedure changes were not made by individuals knowledgeable of the specific work conditions. The number of procedure changes was overwhelming. However, when procedures were unclear, workers would typically stop their work and seek guidance.

Participants also indicated frustration over the poor quality work packages being sent to the control room for review and approval. In addition, because of the time being spent on the review of work packages and administrative burdens, the Shift Technical Advisors, Control Room Supervisors and Shift Managers had less time to focus on their principal task of monitoring and directing activities in the control room. However, interviewees also noted that if a plant event were to occur, the Shift Technical Advisors, Control Room Supervisors and Shift Managers would focus on the safety of the plant.

The majority of the participants expressed concerns with the work processes; specifically with the implementation of SAP, the new work control tool. The SAP program was initiated about 18 months ago as the primary software tool used at the station for the corrective action program, work control, procedures, danger tagging, etc... and represented a fundamental change in how station work is conducted; however, training presented on the new process was ineffective. Several revisions have been made to SAP recently, but have not resulted in the desired improvements. SAP is difficult to use, including searching for procedures, and in implementation of the corrective action program.

Another common theme was that training for accredited and non-accredited job skills was substandard or non-existent. The lack of training has impacted the ability of station personnel to qualify on certain activities or maintain job qualifications and has resulted in the shortage of qualified craft workers. Alternately, licensed operator training had recently improved. There was widespread criticism that plant-wide stand downs were often ineffective human performance training tools because they did not apply to each work group.

The majority of the interviewees have not seen their upper management in the field, which has contributed to a feeling that managers are unaware of the challenges faced by the workforce. In addition, supervisors and managers are often in mandatory meetings and not as available for consultation. Many individuals expressed a concern that their managers are driven more by tasks,

metrics, and meetings, rather than by ensuring workers understand expectations, are trained, and have sufficient resources and procedures to do their job.

### Problem Identification and Resolution

Participants noted that through the site's corrective action program, over 42,000 notifications were written in 2009. It was evident that there are inconsistent thresholds for deciding what issues require a notification. In addition, problem descriptions are poor and often require clarification in order to develop corrective actions. Many of the participants also questioned how the review committee set the priority for addressing the notifications without clarification on poor quality problem statements. Prior to February 11, 2010, the station did not have a way for workers to write an anonymous notification and many of the contract craft could not write notifications at all because they did not have access to site computers.

In attempting to develop corrective actions for the notifications, many of the participants stated they were concerned that the overwhelming number of notifications and associated due dates were distracting them from more significant issues. Corrective actions for the notifications were schedule-driven much more so than quality-driven. Due to the workload, many work groups do the minimum required to meet the assigned due dates. This contributed to the problems with the procedure changes being made at the last minute.

Many individuals perceived that workers are unjustly disciplined or terminated for low-level human performance errors, without adequate evaluation of the event. Also, they did not believe SONGS management holds workers responsible for procedure violations; instead of correcting the behavior, procedures are revised to include extra barriers thereby adding to procedural complexity.

Most workers believed that effective communication among work groups was inconsistent. Work groups are in their own "silos," with poor communication and team work between the groups. Managers did not communicate well with other work groups, making accomplishing tasks more difficult.

### Safety Conscious Work Environment

The majority participants felt comfortable raising concerns to their supervisors, writing notifications, contacting the Nuclear Safety Concerns Program, or discussing concerns with the NRC. The inspectors facilitating these focus groups in February 2010 estimated the number of individuals interviewed who stated they would not raise concerns to the NRC for fear of retaliation was less than five percent of the work force. However, the inspectors did identify pockets of work groups who did not feel comfortable raising concerns to their supervisors or managers, the Nuclear Safety Concerns program, or the NRC. Due to the intimidating managerial style of some supervisors and managers, several interviewees expressed a hesitation for raising concerns to these managers for fear of retaliation. When pressed about their level of comfort to raise safety concerns, workers confirmed that for safety significant issues, they would find an alternate avenue to raise the concern (e.g., maybe have a co-worker or a different supervisor/manager raise the issue).

The majority of individuals interviewed had no experience with the Nuclear Safety Concerns Program. However, several workers stated they were not confident in the Nuclear Safety Concerns Program at SONGS. There was a belief that the Nuclear Safety Concerns Program would not review an anonymous concern.

Based on these additional focus groups, workers perceive problems in all three areas of safety culture, as articulated in the NRC's cross-cutting areas. Many of these perceptions are consistent with NRC findings as well as internal and external SONGS audit results. The team found that the workers were very conscientious and had a strong sense of duty to ensure safety at the plant. For example, workers agreed with management's message that the workers were the guardians of nuclear safety for the public. However, the inspectors determined that these focus group interview results also indicate that corrective actions to address human performance and problem identification and resolution problems continue to be ineffective.

#### **40A6 Meetings**

##### Exit Meeting Summary

On November 20, 2009, the inspectors presented a debrief of preliminary inspection results to Mr. Ross Ridenoure, Senior Vice President and Chief Nuclear Officer, and other members of the licensee staff. On February 3, 2010, the inspectors presented additional results to Mr. Ridenoure, and other members of the licensee staff. On March 2, 2010, the inspectors and Michael Hay, Chief, Technical Support Branch, NRC Region IV, presented final inspection results to Mr. Ridenoure and members of the licensee staff. The licensee acknowledged the issues and findings presented.

The inspectors asked the licensee whether any materials examined during these inspections should be considered proprietary. The licensee confirmed that all proprietary information was returned or destroyed during these inspections.

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee Personnel**

D. Bauder, Plant Manager  
B. Corbett, Director, Performance Improvement  
G. Cook, Manager, Nuclear Regulatory Affairs  
S. Gardner, Senior Nuclear Engineer, Maintenance/System Engineering  
S. Genschaw, Manager, Maintenance & Construction Services  
M. Graham, Manager, Plant Operations  
A. Hochevar, Station Manager  
G. Johnson, Jr., Senior Nuclear Engineer, Maintenance/System Engineering  
L. Kelly, Engineer, Nuclear Regulatory Affairs  
G. Kline, Director, Engineering  
A. Martinez, Manager, Performance Improvement  
M. McBrearty, Technical Specialist, Nuclear Regulatory Affairs  
R. Ridenoure, Senior Vice President and Chief Nuclear Officer  
R. Sandstrom, Manager, Special Projects  
R. St. Onge, Director, Nuclear Regulatory Affairs

#### **NRC Personnel**

G. Warnick, Senior Resident Inspector  
J. Reynoso, Resident Inspector  
M. Hay, Chief, Technical Support Branch

## LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

### Opened and Closed

05000361; 362/2009009-01	NCV	Failure to Follow a Level 1 Quality Assurance Program Affecting Human Performance Procedure (Section 40A2)
05000361; 362/2009009-02	NCV	Failure to Maintain Written Procedures Covered in Regulatory Guide 1.33 (Section 40A2)

## LIST OF DOCUMENTS REVIEWED

### Section 40A2: Identification and Resolution of Problems

#### Procedures

<u>NUMBER</u>	<u>TITLE</u>	<u>REVISION</u>
SO123-VI-0.9	Definitions	11
SO123-XV-50.CAP-3	Corrective Action Program Evaluations and Action Plans	1
SO23-V-12.2.2	Surveillance Requirement Core Protection Calculator Channel Calibration and Functional Test	22
SO123-0-A1	Conduct Of Operations	26
SO123-I-1.3	Work Activity Guidelines	23
SO123-I-1.48	Temporary Supervisor and PRO Supervisor Responsibilities	4
SO123-RP-2	Performance Measurement Program	8
SO123-XV-50.CAP-1	Writing Nuclear Notifications For Problem Identification And Resolution	2
SO123-XV-50.CAP-2	Songs Nuclear Notification Screening	3

SO123-XV-52	Functionality Assessments And Operability Determinations	12, 13, and 14
SO123-XV-HU-1	Human Performance Program	3
SO123-XV-HU-2	Human Performance Tools	0 and 1
SO123-XV-HU-3	Written Instruction Use and Adherence	0
SO123-XX-19	Operational Decision Making Process	4
SO123-XX-5	Work Clearance Application/Work Clearance Document/Work Authorization Record	26
SO23-XX-8	High Risk Activities and Evolutions	3

Nuclear Notifications

NUMBER

200673169	200672855	200673208	200674219	200674454
200671178	200674922	200670679	200671179	200670169
200674363	200668551	200674634	200674630	200676488
200676480	200667711	200674264	200286912	20556072
200631232	200531003	200501125	200481911	200454529
200625805	200047962	200059004	200266059	200269845
200047962	200072445	200100730	200316724	200317475
200062659	200134704	200138541	200325152	200328394
200128454	200175730	200179356	200335424	200343618
200166101	200185500	200185675	200359655	200362147
200184777	200185734	200186404	200365378	200367154
200185731	200191474	200191475	200368391	200375290

200188202	200192672	200196248	200379613	200383710
200191551	200197085	200197750	200385159	200387458
200196446	200200485	200200604	200388579	200392996
200199812	200201790	200204486	200396137	200396887
200200613	200204665	200204668	200399269	200399682
200204664	200206360	200206932	200415807	200600372
200205039	200209942	200211559	200438995	200454876
200209940	200212254	200212455	200481423	200482644
200212001	200215253	200216663	200497848	200500611
200213635	200227506	200228666	200506121	200518826
200219670	200229277	200229294	200531811	200534262
200229228	200229971	200230151	200579234	200580999
200229861	200233194	200256258	200588970	200589452
200231097	200368021	200423776	200591825	200415807
200309526	200378032	200600607	200556068	200522416
200320164	200384144	200459359	200580999	200397796
200333607	200388551	200496313	200591825	200362248
200358164	200393956	200500703	200005504	

Maintenance Orders

NUMBER

800121216	800166151	800073513	800351624	800180140
800232925	800257053	800351644	200415807	800180079
800389750	800351324	800389737	800195258	

Miscellaneous

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
	Management Review Meeting Handout	November 17, 2009
	Response to NRC Mid-Cycle Performance Review Letter for the San Onofre Nuclear Generating Station	October 30, 2009
HUIS01	Human Performance Training	1
SO123-XXI-1.11.23	Human Performance Training Program Description	0
	Closure Review Board Package for Site Integrated Business Plan Action 5.1.4.A	November 16, 2009
	SONGS Human Performance Tools Handbook for Workers	2009
	Effectiveness Review for Human Performance Root Cause Corrective Action to Preclude Repetition Three	August 25, 2009
	Closure Review Board Package for Site Integrated Business Plan Action 5.1.5.A	October 19, 2009
	Closure Review Board Package for Site Integrated Business Plan Action 5.8.1.A	October 19, 2009
	Closure Review Board Package for Site Integrated Business Plan Action 5.1.3.D	August 21, 2009
	Effectiveness Review Challenge Board Results	September 4, 2009
	San Onofre Nuclear Generating Station Focused PI&R Inspection	November 16, 2009
	Weekly Stand Up Meeting Handout	November 17, 2009
	Operational Alignment Meeting Handout	November 17, 2009

	Closure Package Quality Metric Improvement Plan	November 19, 2009
	Independent Safety Culture Assessment Results and Action Plans (Response to NRC Mid-Cycle Performance Review Letter for the San Onofre Nuclear Generating Station)	October 29, 2009
	Safety Conscious Work Environment General Training	August 19, 2008
	SONGS Trending Data from Action Way – Level 3 Charts	
	Independent Safety Culture Assessment Results and Action Plans (Response to NRC Mid-Cycle Performance Review Letter for the San Onofre Nuclear Generating Station)	October 29, 2009
RCE 200628887	Ineffective Corrective Action to Prevent Recurrence	October 18, 2009
	Bechtel Organization Chart	
	SONGS Human Performance Root Cause Evaluation (RCE) - 1	
	Final Report SONGS 2009 Nuclear Safety Culture Assessment	August 26, 2009
	Analysis of the Results of the 2008 Nuclear Safety Cultural Assessment In the Areas of the Nuclear Safety Concerns Program and the Safety Conscious Work Environment	August 14, 2008

SONGS Focused Baseline Inspection  
Request for Information October 29, 2009

This report will be issued as Inspection Report 05000361/2009005 and 05000362/2009005 (subsequently changed to Inspection Report 05000361/2009009 and 05000362/2009009). The primary inspection procedure used will be Inspection Procedure 71152. This inspection will be performed November 16 - 20, 2009. All requested information should be limited to the periods described unless otherwise specified. To the extent possible, please provide the information in electronic media. The agency's document software is in Microsoft Office. However, we can also accept Word Perfect suite files and Adobe Acrobat (.pdf) text files.

Please provide the requested information electronically by November 6, 2009. CERTREC / IMS web uploading is acceptable.

If you have questions about the content of this list or foresee difficulties in collecting this information by the requested date, please contact the inspection team lead, Michelle Catts, at (623) 393-3737.

Note: Any corrective action documents provided should include detailed documentation of the issue, resolution, corrective actions, and final disposition as applicable.

Note: Any sensitive information can be reviewed in person the week of the inspection.

## **Substantive Cross-Cutting Issues**

To address the following substantive cross-cutting issues:

- a) For the cross-cutting aspect in the area of human performance associated with resources, involving the theme of failing to provide adequate procedures or work instructions
  - b) For the cross-cutting aspect in the problem identification and resolution area associated with the corrective action program involving instances of failing to thoroughly evaluate problems such that the resolutions effectively address causes and extent of conditions.
1. The written response to Annual Assessment Letter – San Onofre Nuclear Generating Station (NRC Inspection Reports 05000361/2009001 and 000362/2009001) describing the status of your corrective actions planned to address the human performance and the problem identification and resolution cross-cutting issues, including schedules, milestones, and performance monitoring metrics.
  2. The corrective action program documents to address these substantive cross-cutting issues.
  3. Current performance monitoring metrics or measures to address the substantive cross-cutting issues.
  4. The results of any audits, self-assessments, or effectiveness reviews performed on these substantive cross-cutting issues since May 2009.
  5. Governing procedures/policies/guidelines for:
    - 5.1. Corrective action program/condition reports
    - 5.2. Apparent and root cause evaluation/determinations
    - 5.3. Employee concerns program
    - 5.4. Operability determinations/evaluations
  6. List of root causes and apparent causes performed starting June 2009 with a brief description of the issue.
  7. List of notifications with brief descriptions starting June 2009 tagged with a human performance or problem identification and resolution code.
  8. List of notifications starting June 2009 with brief descriptions.

## **Independent Safety Culture Survey**

1. Independent Safety Culture Assessment 2009 Results
2. Notification 000200625805
3. Percent participation in the Independent Safety Culture Assessment 2009 by organization
4. Corrective actions to address the results of the Independent Safety Culture Assessment 2009

5. Metrics to monitor the effectiveness of the corrective actions for the Independent Safety Culture Assessment 2009
6. Write-in comments for the Independent Safety Culture Assessment 2009
7. Employee Concerns Program:
  - 6.1 Any identified trends
  - 6.2 Any identified trends associated with a chilling environment
  - 6.3 Any Employee Concerns Program Metrics
7. Last Independent Safety Culture Survey Results before 2009
8. Corrective actions, metrics, and effectiveness reviews for the Last Independent Safety Culture Survey Results before 2009
9. Organization Charts for each organization including old Bechtel groups and the new Shaw groups