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October 29, 2009

Mr. Elmo E. Collins
Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

Subject: **Docket Nos. 50-361 and 50-362**
Independent Safety Culture Assessment Results and Action Plans
(Response to NRC Mid-Cycle Performance Review Letter for the San
Onofre Nuclear Generating Station)

References: (1) NRC Letter, dated March 4, 2009, Annual Assessment Letter – San
Onofre Nuclear Generating Station (NRC Inspection Reports
05000361/2009001 and 05000362/2009001).

(2) NRC Letter, dated September 1, 2009, Mid-Cycle Review and
Inspection Plan – San Onofre Nuclear Generating Station, from E.E.
Collins, Regional Administrator, NRC Region IV, to R.T. Ridenoure, Chief
Nuclear Officer of Southern California Edison Company.

(3) SCE Letter, dated July 1, 2009, Response to Annual Assessment
Letter – Plans for Independent Safety Culture Assessment of SONGS,
from R.T. Ridenoure, Chief Nuclear Officer of Southern California Edison
Company to E.E. Collins, Regional Administrator, NRC Region IV

Dear Mr. Collins:

In its March 4, 2009 Annual Assessment Letter (Reference 1) for the San Onofre
Nuclear Generating Station (SONGS), the U.S. Nuclear Regulatory Commission (NRC)
requested that Southern California Edison Company (SCE) "perform an independent
assessment of the safety culture at SONGS as described in NRC Manual Chapter 0305,
'Operating Reactor Assessment Program...'" SCE has completed that assessment. As
requested by the NRC in Reference 2, this letter describes the results of the
independent safety culture assessment and associated planned actions and projected
completion dates to address those results.

As described in Reference 3, the independent safety culture assessment was
performed in two phases: (1) an independent safety culture survey by SYNERGY, Inc.;
and (2) interviews, observations of activities, and review of data by an Independent

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Safety Culture Evaluation Team (ISCET) that included individuals with experience in the management or regulation of nuclear power facilities and in the evaluation and resolution of safety culture and safety conscious work environment issues. The ISCET also included members with industrial safety and/or organizational development experience outside the nuclear power industry. Both SYNERGY and the ISCET consisted of individuals who are not employees of SCE or its affiliates.

The SYNERGY survey was performed in May 2009, and obtained responses from more than 80% of SONGS personnel, including both SCE employees and contractors. The ISCET assessment was performed in July 2009, and included: review of site programs, procedures, policies, metrics, inspection and assessment results; observation of more than 35 site meetings, training sessions, briefings, and turnovers; and interviews of more than 180 SCE and contractor personnel at all levels in the organization. The ISCET specifically considered the results of the SYNERGY survey in formulating its conclusions. Accordingly, the ISCE results represent the overall conclusions of the SONGS independent safety culture assessment.

In combination, the SYNERGY survey and the ISCE addressed the safety culture attributes described in NRC Inspection Manual Chapter 0305, including the safety culture attributes associated with cross-cutting themes within the Human Performance (HU) and Problem Identification & Resolution (PI&R) areas that have been identified at SONGS.

INDEPENDENT SAFETY CULTURE ASSESSMENT RESULTS AND RESPONSIVE ACTION

Overall Conclusion

Overall, the independent safety culture assessment determined that the safety culture at SONGS is sufficient to support safe plant operations. Site management is communicating strong and consistent safety messages, including:

- Safety is the first priority.

- Site personnel are encouraged and expected to identify and report potential safety concerns.

- It is essential for site personnel to comply with SONGS procedures and programs and stop when uncertain.

- Retaliation against those who raise safety concerns is not permitted and will not be tolerated.

Site personnel, both SCE employees and contractors, generally appear to understand and accept these messages. No immediate safety concerns were identified.

However, the independent safety culture assessment also identified:

1.   Five areas of performance (Action Areas) in which action is necessary for SONGS to preserve and improve its safety culture;

2.   Other specific safety culture issues that warrant action; and

3.   Specific site groups in which there are particular safety culture issues warranting attention.

These issues are summarized below.

Areas Requiring Action to Preserve and Improve Safety Culture

The five Action Areas are described below, along with a reference to the NRC Safety Culture Components associated with the issues that contributed to the Action Area (identified in parentheses following each Action Area).

Action Area 1 – Accountability and Disciplined Follow-Through

There have been weaknesses in accountability and disciplined follow-through. Areas in which accountability and follow-through must be improved include completion of top-tier commitments; timely, quality implementation of improvement plans; and adherence to site standards for quality, compliance, and timely completion of actions. Management must ensure that as it reinforces accountability and drives change, an environment supportive of the raising of concerns and building trust among the site personnel is maintained. Also, in some cases, metrics and methods of performance review are not structured to measure effectiveness and results, but instead are focused on counting numbers of items processed. (Accountability; Work Practices; Self- and Independent Assessments; Decision-Making; and Environment for Raising Concerns)

Action Area 2 – Change Management and Site Engagement

Multiple improvement plans are underway to remedy performance issues at SONGS, but there has been limited explicit consideration of change management and the collective impacts of change as improvement plans have been developed and implemented. Input often has not been sought from first-line supervisors and employees prior to the implementation of significant changes regarding the impact and feasibility of those changes in terms of implementation in the field. In some cases, this has resulted in personnel feeling overwhelmed by the number of changes and unclear as to their particular roles in supporting performance improvement. In addition, some changes have proven unworkable or not useful in practice due to specific conditions or conflicting program requirements at SONGS. There is also need for more targeted management follow-up after changes are

implemented, and for more formal processes for addressing potential Safety Conscious Work Environment impacts of organizational and personnel changes. (Organizational Change Management; Preventing, Detecting, and Mitigating Perceptions of Retaliation)

Action Area 3 – Utilization of Oversight and External Input

SONGS has often viewed input from oversight and external groups as informational rather than as actionable opportunities to learn and improve. As a consequence, there have been weak or untimely responses to issues identified by oversight or external groups. In a number of areas, findings have not been consistently entered into the Corrective Action Program (CAP) and management has not consistently ensured that appropriate responsive action was taken. There have been recent efforts to strengthen responses in some of these areas, but further effort is needed to ensure that oversight and external inputs are embraced as learning opportunities and used as a means for improving station performance. (Self- and Independent Assessments; Corrective Action Program; Accountability; Operating Experience)

Action Area 4 – Functions and Roles of Key Programs

The functions and performance of several key programs at SONGS need to be reexamined and reinvigorated in order to meet current industry standards and preserve and improve the SONGS safety culture. The station has correctly recognized Work Management and the CAP as areas that must receive priority attention, but there are other specific programs that warrant improvement. These include: Nuclear Oversight; Operating Experience; Benchmarking; Corporate Oversight; Training; Human Resources; site recovery organization; and procedural quality. Efforts to improve particular programs should be prioritized to focus first on those programs having the most significant direct impact on plant operations and safety. (Work Control; Self- and Independent Assessments; Operating Experience; Continuous Learning Environment; Accountability; Preventing, Detecting, and Mitigating Perceptions of Retaliation; Resources; Corrective Action Program)

Action Area 5 – Consistent Strategic Vision and Approach

SONGS management has recently taken a number of significant steps to address performance problems, improve site performance standards, and increase accountability. Many of the improvement actions have been taken individually rather than within the framework of an overall strategy. Consequently, although site personnel generally understand the site's top three areas for improvement (HU, PI&R, and Work Management), there is less understanding of individual and departmental roles in supporting these improvements. Multiple slogans, plans, logos, and models have been issued that do not appear fully aligned, and there has not been consistent strong alignment and teamwork among senior

management leaders (a number of whom are fairly new to SONGS) in addressing some key site-wide issues. A number of improvement plans have not yet been fully developed or are of inconsistent quality. These plans need to address a longer time horizon, and there are some areas in which the strategy remains unclear. (Accountability; Organizational Change Management)

For each of these Action Areas, SCE has identified the top-tier (Level 1) actions that will be taken, along with scheduled completion dates for those actions. These top-tier actions and associated completion dates are presented in Attachment 1. Each of these actions is being implemented through the SONGS Nuclear Safety Culture Improvement Plan within the Site Integrated Improvement Plan (SIIP) and has been entered into the CAP. Additionally, SCE is implementing improvement plans in other areas—such as HU and CAP—that address a number of the issues addressed in the independent safety culture assessment.

Other Safety Culture Issues that Warrant Action

Within each of the above Action Areas, there were a number of lower-level issues and examples that warrant specific action. Also, some discrete issues were identified that were not associated with a particular Action Area. SCE has reviewed these other issues and for each is either: (a) identifying actions to address these issues and entering these actions into the Safety Culture Improvement Plan within the SIIP and into the CAP (Level 2 actions); or (b) entering these issues into the CAP (Level 3 issues). The completion of these actions (both Level 2 and Level 3) will also be tracked by the Safety Culture Project Manager within the SONGS site recovery organization.

Safety Culture Issues Within Specific Site Groups

The independent safety culture assessment identified 11 specific site groups in which there are particular safety culture issues warranting attention. Within these groups, the assessment identified several common themes regarding the need for improvement, including:

- Continuing frustrations with the effectiveness and efficiency of the work management / work control process;

- Concerns about the adequacy of staffing levels for a number of the groups tied, in part, to concerns about the ability of training pipelines to provide qualified individuals in a timely manner; and

- Concerns about the consistency of the site's drive for more accountability for procedural compliance and schedule adherence and the dispensing of any attendant discipline.

For each of the identified groups, the responsible site division, working in conjunction with the Safety Culture Project Manager, is developing an improvement plan. The actions included in these improvement plans are being entered into the CAP, and the overall completion of these improvement plans is being tracked through the Nuclear Safety Culture Improvement Plan within the SIIP. The common themes are being addressed both within the groups and through Level 1 actions described in Attachment 1.

MONITORING SAFETY CULTURE PROGRESS AND EFFECTIVENESS

SCE is employing several methods to monitor the progress in implementing actions to address the safety culture issues identified during the independent safety culture assessment and to evaluate the effectiveness of these actions:

- The implementation of the Level 1 and Level 2 safety culture actions, and the completion of the action plans to address safety culture issues in specific site groups will be tracked through the SIIP. As such, completion of these actions will be subject to the SONGS formal closure review process, SPPG-SO123-G-1, "Closure Review Process," which includes preparation of formal closure packages reviewed by a Closure Review Board (CRB).

- SCE is establishing performance measures for each of the Action Areas to evaluate whether the actions in those areas are effective. These performance measures will be in place at the latest by February 28, 2010, and will be monitored by the SONGS Senior Leadership Team and by the Safety Culture Project Manager within the SONGS site recovery organization.

- The implementation and effectiveness of the Safety Culture Improvement Plan within the SIIP will be evaluated on a quarterly basis by an Effectiveness Review Challenge Board (ERCB) consisting of a senior member of SONGS management, the Director, Special Projects or designee, and an experienced non-SCE member. During its reviews, the ERCB will identify any "check and adjust" actions deemed necessary to meet improvement goals, and those actions will be tracked to completion.

- SCE will perform a follow-up assessment in each of the groups identified as having specific safety culture issues warranting particular attention. These assessments will evaluate the effectiveness of actions to address the issues in each group, and will include participation by at least one non-SONGS individual with experience in evaluating safety culture and safety conscious work environment issues. These assessments will be completed by July 30, 2010.

- To assess progress in addressing the issues identified in the 2009 independent safety culture assessment, SCE intends to conduct a follow-up, site-wide independent safety culture assessment by April 2011.

*   *   *   *   *

The independent safety culture assessment has provided valuable insights into the safety culture of SONGS. We believe that systematic action to address the results of this assessment will improve our safety culture and station performance. We will closely monitor and evaluate our progress to ensure effectiveness.

Please contact me, or Mr. Richard St. Onge at (949) 368-6240, should you require any further information.

Sincerely,

Attachments: As stated

cc: E. E. Collins, Regional Administrator, NRC Region IV
       R. Hall, NRC Project Manager, San Onofre Units 2 and 3
       G. G. Warnick, NRC Senior Resident Inspector, San Onofre Units 2 and 3

Area 1: Accountability and Disciplined Follow-Through

Actions	Completion Date
Develop a short site standards document that describes fundamental accountabilities of site organizations. Among other things, site-wide accountabilities included in this document should address nuclear safety, compliance with requirements and procedures, timely completion of activities, and Safety Conscious Work Environment.	02/15/10
Develop an overall alignment and accountability document that includes: the SONGS Leadership Model and the roles, responsibilities and functions for key site programs and divisions for use in leadership alignment, including in the Leadership Academy. This document should include a concise listing of overall site standards and individual department standards for use in governing behaviors, including specific standards for use of change management, responsiveness to internal and external oversight, accountability management, nuclear safety, Safety Conscious Work Environment (SCWE), and support for key site-wide programs such as CAP and Work Management.	03/15/10
Conduct a leadership seminar for station managers and supervisors in the manager/supervisor development program to gain understanding and alignment around Leadership Model and alignment and standards document.	04/30/10
Implement the SONGS Leadership Academy to reinforce the SONGS Leadership Model and the SONGS Excellence strategy.	04/30/10
Revise the leadership engagement process, including revising procedure NOAPG-SO23-G-1.2 "Leadership Engagement and Observation Guideline" and formalizing the "Management Day in the Field" process in Human Performance Procedures.	Complete
Develop and initiate "Management Day in the Field" program and formalize in Human Performance procedures.	Complete
Improve the process used by management to assess station performance to better identify an accurate picture of performance and facilitate "check and adjust" response.	04/30/10
Perform systematic review of division performance indictors to ensure that they support roll-up to core station metrics and appropriately measure both timely completion and quality implementation or activities.	03/28/10
Clarify roles and responsibilities of the Site Recovery Organization and align its staffing to support tracking and reporting of plan implementation.	02/28/10
Establish specific work down curve and/or schedule for backlog of actions requiring Closure Review Boards (CRBs) and implement so that by March 2010, CRBs are normally completed within 30 days of action completion as indicated in SAP. Establish mechanism to provide visibility and accountability for items not adhering to the schedule.	02/20/10
Review progress in selected improvement plans utilizing quarterly Effectiveness Review Challenge Boards (ERCBs).	Implementation begun August 2009
Establish specific schedule for ERCBs to ensure that ERCBs normally occur within 30 days of the end of the quarter being evaluated for selected SIIP Action Plans.	01/15/10
Establish requirement for Senior Leadership Team participation in ERCB process.	Complete
Establish and implement mechanism for communicating ERCB results to the site.	01/15/10
Implement an NRC commitment tracking system that assigns personnel to actively manage commitments to NRC, including early warning to senior management of any commitments in jeopardy of not being met.	01/30/10

Establish and hold periodic regulatory performance meetings at which senior management reviews the regulatory calendar and progress in addressing key regulatory issues such as cross-cutting issues, the Confirmatory Order, and NRC violations.	01/30/10
Perform a follow-up assessment in each of the groups identified in the 2009 independent nuclear safety culture assessment as having specific safety culture issues warranting particular attention. These assessments will evaluate the effectiveness of actions to address the issues in each group, and will include participation by at least one non-SONGS individual with experience in evaluating safety culture and safety conscious work environment issues.	07/31/10
Conduct a follow-up, site-wide independent safety culture assessment to determine progress in addressing the issues identified in the 2009 independent safety culture assessment.	04/30/11

Area 2: Change Management and Site Engagement	
Actions	**Completion Date**
Appoint a site leader to drive the application of change management.	Complete
Benchmark change management processes and develop a revised change management process/procedure that includes: (1) thresholds for application of change management, (2) mechanisms for input, as appropriate, from supervisors/working level personnel in developing changes, and (3) threshold for initiating change effectiveness reviews.	03/30/10
Incorporate change management principles into the Leadership Academy curriculum.	04/30/10
Develop method for presenting the senior leadership team with information on the volume of significant changes/improvement actions so that the amount of concurrent planned change is apparent.	02/28/10
Review and upgrade the strategic improvement/business planning process so that it clearly defines roles and responsibilities of participants and explicitly considers: (1) cumulative impact of concurrent improvement actions; (2) input from appropriate site stakeholders; and (3) a longer (2-3 year) time horizon.	03/31/10
Develop a process that addresses the potential impact to SCWE in an organization before "restructuring" as defined in Employee Mobility Policy 209, before plans are finalized for that organization.	02/15/10

Area 3: Utilization of Oversight and External Input	
Actions	**Completion Date**
Modify the Corrective Action Process to require notifications to be written for problems identified in external assessments and reports (e.g., NOB, NRC and formal peer evaluations).	Complete O-800257053-0212
Review site audit approach to ensure that placement of issues from NOD, NOB, and external organizations into the CAP is periodically audited.	02/15/10
Review appropriate NOD and CAP procedures to ensure that NOD findings receive NOD concurrence prior to closure.	02/15/10
Develop a method for tracking completion of actions in response to significant findings from external organizations.	01/30/10
Develop a process for review, disposition, and report back to NOB on how NOB issues are addressed. Obtain NOB concurrence on this process and how NOB reports might be better formatted to facilitate this process.	03/15/10
Perform a review of SONGS use and evaluation of OE. Based upon the results of this review, develop an OE improvement plan.	02/18/10

Area 4: Functions and Roles of Key Programs	
Actions	**Completion Date**
Develop a short site standards document that describes fundamental accountabilities of site organizations. Among other things, site-wide accountabilities included in this document should address nuclear safety, compliance with requirements and procedures, timely completion of activities, and Safety Conscious Work Environment.	02/15/10
Develop an overall alignment and accountability document that includes: the SONGS Leadership Model and the roles, responsibilities and functions for key site programs and divisions for use in leadership alignment, including in the Leadership Academy. This document should include a concise listing of overall site standards and individual department standards for use in governing behaviors, including specific standards for use of change management, responsiveness to internal and external oversight, accountability management, nuclear safety, Safety Conscious Work Environment (SCWE), and support for key site-wide programs such as CAP and Work Management.	03/15/10
Conduct a leadership seminar for station managers and supervisors in the manager/supervisor development program to gain understanding and alignment around Leadership Model and alignment and standards document.	04/30/10
Implement the SONGS Leadership Academy to reinforce the SONGS Leadership Model and the SONGS Excellence strategy.	04/30/10
Develop and communicate clear roles and responsibilities for groups interfacing with the work preparation process, including identifying management sponsorship of the process phases and actions to address improvement areas identified during the implementation.	12/31/09
Establish a project plan and schedule for resolving SAP issues that includes: mechanisms for employee input on problems and solutions; definition of end-state desired performance; implementation of improvements; and evaluation of effectiveness.	02/15/10
Perform a review of SONGS use and evaluation of OE. Based upon the results of this review, develop an OE improvement plan.	02/18/10
Develop an action plan to improve the use and institutionalization of benchmarking at SONGS.	03/30/10
Review mechanisms for SCE corporate oversight of SONGS to ensure that there is a structured, periodic, diverse process for SCE to receive input on SONGS performance.	03/15/10
Review functions and roles of Human Resources to ensure alignment with SONGS performance goals.	04/15/10
Establish a method to segregate procedures with technical deficiencies and suspend their use prior to correction.	Complete
Develop and begin implementation of a procedure quality improvement plan that manages the vulnerabilities of poor written instruction quality. This plan will contain the following elements: • Assigning a leader to manage this improvement area • Prioritizing procedures for review based on risk significance • Developing a screening methodology to identify procedure quality issues • Reviewing procedures for error traps, insufficient detail, technical inaccuracies • Maintaining a work-down plan to track procedure corrections	01/15/10

To ensure training more effectively supports performance improvement and worker qualification completion, upgrades were made to the Operations Training Program and were applied the Maintenance and Technical Training Programs. Specifically: • A "comprehensive self-evaluation", using industry peers, line and training personnel was conducted in August 2009 for the Maintenance and Technical Training Programs. • A Training Recovery Team was re-constituted to address issues in the maintenance and technical programs. • A Maintenance and Technical Training Programs Performance Improvement Plan was created following the same guidelines used to improve the Operations Training Programs.	Complete
Implement the Maintenance and Technical Training Programs Improvement Plan.	09/30/10
Review and upgrade the strategic improvement/ business planning process so that it clearly defines roles and responsibilities of participants and explicitly considers: (1) cumulative impact of concurrent improvement actions; (2) input from appropriate site stakeholders; and (3) a longer (2-3 year) time horizon.	03/31/10
Clarify roles and responsibilities of the Site Recovery Organization and align its staffing to support tracking and reporting of plan implementation.	02/28/10
Perform a review and revision (or replacement) of top level SONGS site governance documents that define roles, responsibilities and functions of key departments and programs.	09/30/10
Perform process mapping for key site functions such as corrective action, oversight, operability determinations, and work management to ensure clear understanding of how each works, ensure alignment between processes, and ensure clarity for interfaces and that appropriate procedural, organizational, and oversight support is in place.	07/31/11

Area 5: Consistent Strategic Vision and Approach

Actions	Completion Date
Develop an overall alignment and accountability document that includes: the SONGS Leadership Model and the roles, responsibilities and functions for key site programs and divisions for use in leadership alignment, including in the Leadership Academy. This document should include a concise listing of overall site standards and individual department standards for use in governing behaviors, including specific standards for use of change management, responsiveness to internal and external oversight, accountability management, nuclear safety, Safety Conscious Work Environment (SCWE), and support for key site-wide programs such as CAP and Work Management.	03/15/10
Implement the SONGS Leadership Academy to reinforce the SONGS Leadership Model and the SONGS Excellence strategy.	04/30/10
Replace the existing multiple models with "SONGS Excellence" model; roll out communication for this model and eliminate previous models.	01/15/10
Develop a change management plan for the "SONGS Excellence" model including how it supports the site integrated improvement plan.	02/30/10
Review and upgrade the strategic improvement/ business planning process so that it clearly defines roles and responsibilities of participants and explicitly considers: (1) cumulative impact of concurrent improvement actions; (2) input from appropriate site stakeholders; and (3) a longer (2-3 year) time horizon.	03/31/10
Conduct reviews of site strategic improvement plans to ensure that (a) improvement plans exist to address issues where significant improvements in performance are needed; (b) improvement actions in plans are appropriate to address issues; (c) actions can be implemented as scheduled; (d) appropriate metrics and/or other performance measures are established; and (e) challenge boards (including outside personnel) review the revised plans.	03/31/10
Perform a review of division performance indictors to ensure that they support roll-up to core station metrics and appropriately measure both timely completion and quality implementation or activities.	03/30/10
Review progress in selected improvement plans utilizing quarterly ERCBs.	Implementation begun August 2009

CATEGORY & ITEM

Documents _not_ to be placed in ADAMS

A.1   Allegation information
A.2   Investigation information

Placed in ADAMS, Not routinely released to the Public

A.3   Security-Related Information
A.4   Proprietary Information
A.5   Privacy Act/Personally Identifiable Information
A.6   Federal, State, and Foreign Government, and International Agency Information
A.7   Sensitive Internal Information

B.1   Routine Administrative Records
B.2   Records Reviewed for Release Upon Request (per SECY-04-0191 and
       SECY-05-010)

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ADAMS: ☐ No ☒ Yes	☒ SUNSI Review Complete	Reviewer Initials: _NBa_
	☒ Publicly Available	☒ Non-Sensitive
Category A.	☐ Non-publicly Available	☐ Sensitive
KEYWORD: **MD 3.4 Non-Public A.**		

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