



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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September 1, 2009

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: MIDCYCLE PERFORMANCE REVIEW AND INSPECTION PLAN –  
SAN ONOFRE NUCLEAR GENERATING STATION

Dear Mr. Ridenoure:

On August 4, 2009, the NRC staff completed its performance review of San Onofre Nuclear Generating Station (SONGS), Units 2 and 3 for the first half of the calendar year 2009 assessment cycle. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous 12 months. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only – Security-Related Information" will include the security cornerstone review and resultant inspection plan.

Although SONGS Units 2 and 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives, the NRC continues to identify performance problems in human performance and problem identification and resolution. This is the fourth consecutive assessment cycle where substantive crosscutting issues were identified in human performance and problem identification and resolution. We conducted public meetings in May and June of 2009 following the End-of-Cycle Assessment to discuss your improvement initiatives. While we acknowledge that you are seeing some early indications of performance improvements, based on your performance monitoring activities, the NRC will leave open the substantive crosscutting issues until our inspections and observations indicate your corrective actions have been effective. The NRC will continue to conduct periodic public meetings and perform additional inspection activities to closely monitor your effectiveness in addressing these performance deficiencies. The NRC will consider additional actions, if needed, in the event performance improvements are not reflected in inspection and assessment results.

Unit 2 Plant performance for the most recent quarter was within the Regulatory Response column of the NRC's Action Matrix, based on one White finding in the Mitigating Systems cornerstone. The finding involved the failure to establish appropriate instructions for replacement of a safety-related battery output breaker resulting in the battery being inoperable between March 2004 and March 2008. Unit 3 Plant performance was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PI's indicating performance at a level requiring no additional NRC oversight (Green).

During this assessment period, the NRC identified 20 Green findings and one White finding with crosscutting aspects in the human performance area. In our annual assessment letter dated March 4, 2009, we advised you of substantive crosscutting issues associated with the components of resources and work practices involving the themes of failing to provide adequate procedures or work instructions and ineffective use of human error prevention techniques. Our current assessment identified six Green findings involving ineffective use of human error prevention techniques and three findings involving inadequate procedures. The inadequate procedure findings included two Green findings with one in the most recent quarter and one White finding. We determined that your corrective actions have not demonstrated adequate improved performance to close the substantive crosscutting issues.

Additionally, during this assessment period the staff identified an additional human performance theme in the component of decision-making associated with failing to use conservative assumptions. Four findings were identified during the assessment period affecting the Mitigating Systems and Initiating Events cornerstones. Examples of these human performance findings include: failure to implement timely corrective actions to preclude repetition of a significant condition adverse to quality associated with safety related 480 volt breakers, failure to adequately evaluate a degraded relay that affected operability of an emergency diesel generator, failure to adequately evaluate the impact of boric acid leakage effects on the reactor coolant system, and a failure to adequately evaluate degraded conditions to support an operability assessment associated with a degraded component cooling water heat exchanger.

These human performance substantive crosscutting issues will remain open until we determine that corrective actions have been effective.

During this assessment period, the NRC identified eight Green findings and one Severity Level IV finding with crosscutting aspects in the problem identification and resolution area. In our annual assessment letter dated March 4, 2009, we advised you of a crosscutting theme in the component of the corrective action program involving instances of failing to thoroughly evaluate problems such that the resolutions effectively address causes and extent of conditions. During this assessment period seven Green findings were related to this theme. Your staff has taken corrective actions to address these issues; however, these corrective actions have not resulted in adequate performance improvement as evidenced by the continued high number of findings. Therefore, this problem identification and resolution substantive crosscutting issue will remain open until we determine that corrective actions have been effective.

On January 11, 2008, the NRC issued SCE Confirmatory Order EA 07-232. The Order was issued in response to the identification of several instances of willful violations. The Order specified specific actions that SCE committed to perform to address potential safety culture issues. In October 2008, the NRC performed a team inspection that reviewed your corrective actions associated with the Order. Based on this inspection, the team determined you

demonstrated sufficient progress to close eight of the Order items. However, for a significant number of items the team was unable to determine that your staff had taken sufficient actions, therefore these items remained open. On January 14, 2009, the NRC received your letter providing a status report regarding your schedule for completion of the open Order items. The NRC performed a follow-up Confirmatory Order inspection in June 2009. Based on the results of that inspection the NRC closed an additional four Order items. Currently two Confirmatory Order items remain open that involve the completion of training activities scheduled through December 2009 and submittal of a letter to the NRC that discusses your basis for concluding that each Order item has been satisfied. The NRC plans to perform additional inspections following completion of these items.

Your continuing performance problems are of concern to the NRC. This concern is based, in part, on a White finding moving Unit 2 to the Regulatory Response column of the NRC's Action Matrix; four consecutive assessment cycles with substantive crosscutting issues not being effectively addressed in the areas of human performance and problem identification and resolution; and the identification of an additional substantive crosscutting issue theme during this assessment period in the human performance area related to the failure to use conservative assumptions for decision making activities. On the basis of this concern the NRC is requesting the following:

- 1) We request you provide a written response to this letter updating the status of your corrective actions planned to address the human performance and the problem identification and resolution crosscutting issues, including schedules, milestones, and performance monitoring metrics.
- 2) We request you support periodic public meetings to discuss your improvement initiatives for the areas discussed in this letter until sustained improvement is noted.
- 3) In our last assessment letter dated March 4, 2009 we requested that you perform an independent assessment of the safety culture at SONGS. We request you provide us a letter discussing the results of this assessment and any associated planned actions and projected completion dates.
- 4) We request that you provide written notification to the NRC of your readiness for NRC to conduct a 95001 supplemental inspection for the White finding associated with the loose battery connection on Unit 2.

The enclosed inspection plan details the inspections, less those related to security scheduled through December 31, 2010. This inspection plan includes an infrequently performed inspection due to the steam generator replacement outages scheduled to occur during this period. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle review.

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

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Michael Hay at (817) 860-8173 with any questions you may have regarding this letter or the inspection plan.

Sincerely,



Elmo Collins  
Regional Administrator

Dockets: 50-361  
50-362

Licenses: NPF-10  
NPF-15

cc w/enclosure: San Onofre Nuclear Generating Station Inspection/ Activity Plan

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SUNSI Review Completed:   MCH   ADAMS:  Yes  No Initials:   MCH    
 Publicly Available  Non-Publicly Available  Sensitive  Non-Sensitive  
 R:\ EOC and Midcycle\Midcycle Assessment Letters\Songs.doc

RIV C-DRP/D	D:DRS	D:DRP	DRA	RA
MCHay	RCaniano	DChamberlain	CCasto	ECollins
<i>mc</i>				
8/18/2009	8/19/2009	8/20/2009	8/1/2009	8/1/2009

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**San Onofre**  
**Inspection / Activity Plan**  
**09/01/2009 - 12/31/2010**

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
2	09/27/2009	12/31/2009	SGR-J2	- STEAM GENERATOR REPLACEMENT - UNIT 2	1
			IP 50001	Steam Generator Replacement Inspection	
2,3	08/24/2009	09/04/2009	EB1-17T	- 50.59 & MODS	3
			IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
2,3	09/21/2009	09/25/2009	EP1	- EP EXERCISE	4
			IP 2515/175	Emergency Response Organization, Drill/Exercise Performance Indicator, Program Review	
			IP 7111401	Exercise Evaluation	
			IP 7111404	Emergency Action Level and Emergency Plan Changes	
			IP 71151-EP01	Drill/Exercise Performance	
3	10/19/2009	11/27/2009	EB1-08P	- U2 INSERVICE INSPECTION	1
			IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			IP 7111108P	Inservice Inspection Activities - PWR	
2	10/19/2009	10/30/2009	EXAM	- INITIAL EXAM	6
			X02416	INITIAL EXAM UNIT 2-SANO (10/2009)	
			X02417	INITIAL EXAM UNIT 3-SANO (10/2009)	
2,3	10/26/2009	10/30/2009	RP-ORSS	- OCCUPATIONAL RADIATION SAFETY - ALARA	1
			IP 7112101	Access Control to Radiologically Significant Areas	
			IP 7112102	ALARA Planning and Controls	
			IP 71151	Performance Indicator Verification	
2,3	02/08/2010	02/12/2010	PSB2-52B	- BIENNIAL PI&R	5
			IP 71152B	Identification and Resolution of Problems	
			IP 71152B	Identification and Resolution of Problems	
2,3	05/10/2010	05/14/2010	RP-ORS1	- OCCUPATIONAL RADIATION SAFETY - ALARA	1
			IP 7112101	Access Control to Radiologically Significant Areas	
			IP 7112102	ALARA Planning and Controls	
			IP 71151-OR01	Occupational Exposure Control Effectiveness	
			IP 71151-PR01	RETS/ODCM Radiological Effluent	
2,3	06/14/2010	06/18/2010	EB2-05T	- TRIENNIAL FIRE PROTECTION	4
			IP 7111105T	Fire Protection [Triennial]	
			IP 7111105T	Fire Protection [Triennial]	
2,3	08/16/2010	08/20/2010	RP TEAM	- RADIATION SAFETY TEAM INSPECTION	4
			IP 2515/173	Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	
			IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
			IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	
			IP 7112202	Radioactive Material Processing and Transportation	

This report does not include INPO and OUTAGE activities.  
 This report shows only on-site and announced inspection procedures.



San Onofre  
 Inspection / Activity Plan  
 09/01/2009 - 12/31/2010

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
<b>RP TEAM - RADIATION SAFETY TEAM INSPECTION</b>					
2, 3	08/16/2010	08/20/2010	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program	4
2, 3	08/16/2010	08/20/2010	IP 7113011	Material Control and Accounting (MC&A)	
<b>EXAM - INITIAL EXAM</b>					
2	09/20/2010	09/25/2010	X02445	INITIAL EXAM-SONGS (10/2010)	6
3	09/20/2010	09/25/2010	X02446	INITIAL EXAM UNIT 3-SONGS (10/2010)	
2	10/18/2010	10/29/2010	X02445	INITIAL EXAM-SONGS (10/2010)	
3	10/18/2010	10/29/2010	X02446	INITIAL EXAM UNIT 3-SONGS (10/2010)	
<b>RP-ORS1 - OCCUPATIONAL RADIATION SAFETY</b>					
2, 3	09/27/2010	10/01/2010	IP 7112101	Access Control to Radiologically Significant Areas	1
2, 3	09/27/2010	10/01/2010	IP 7112102	ALARA Planning and Controls	
2, 3	09/27/2010	10/01/2010	IP 71151-OR01	Occupational Exposure Control Effectiveness	
2, 3	09/27/2010	10/01/2010	IP 71151-PR01	RETS/ODCM Radiological Effluent	
<b>EB1-08P - INSERVICE INSPECTION - U3</b>					
3	10/12/2010	10/22/2010	IP 2515172	Reactor Coolant System Dissimilar Metal Butt Welds	3
3	10/12/2010	10/22/2010	IP 7111108P	Inservice Inspection Activities - PWR	
<b>EP-1 - BIENNIAL EP PROGRAM INSPECTION</b>					
2, 3	11/15/2010	11/19/2010	IP 7111402	Alert and Notification System Testing	1
2, 3	11/15/2010	11/19/2010	IP 7111403	Emergency Response Organization Augmentation Testing	
2, 3	11/15/2010	11/19/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
2, 3	11/15/2010	11/19/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
2, 3	11/15/2010	11/19/2010	IP 71151-EP01	Drill/Exercise Performance	
2, 3	11/15/2010	11/19/2010	IP 71151-EP02	ERO Drill Participation	
2, 3	11/15/2010	11/19/2010	IP 71151-EP03	Alert & Notification System	
<b>BRQ - OPERATOR REQUAL INSPECTION</b>					
2, 3	11/01/2010	11/05/2010	IP 7111111B	Licensed Operator Requalification Program	3

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