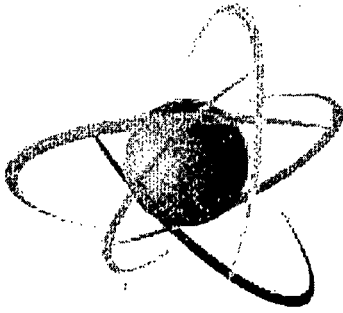


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U.S. NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

SOUTHERN CALIFORNIA EDISON COMPANY

**SAN ONOFRE NUCLEAR GENERATING
STATION UNITS 2 AND 3**

**SITE VISIT
EXECUTIVE DIRECTOR FOR OPERATIONS**

OCTOBER 27, 2010

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions 4, 5, 6, 7, 8
FOIA- 1011-015

A-17

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Agenda
October 27, 2010

Agenda for EDO Visit to San Onofre Nuclear Generating Station

Time	Location	Subject
7:30 am	Doubletree	Meet with Elmo Collins – drive together to site (due to limited parking)
8:00 am – 9:00 am	Rooftop Parking	**Meet with Resident Inspectors**
9:00 am – 12:00 pm	Site	Plant tour with licensee and Resident Inspectors
12:00 pm – 1:30 pm		Catered lunch with Executives
1:30 pm – 2:00 pm		Administrative Break
2:00 pm – 4:00 pm		Meeting with Licensee Senior Executives
4:00 pm		Depart site.

**** Security will have the EDO's badge waiting at the North Gate ****

Telephone Numbers

Regional Administrator	817-917-1203
Senior Resident Inspector	623-826-6452
Resident Office	949-492-2641
Utility Switchboard	626-302-1212

EXECUTIVE SUMMARY

Purpose of the Visit

- To meet with resident inspectors and discuss current plant performance, have discussions with licensee management, and tour the plant with licensee management and NRC staff.

Issues to be Addressed

- Meet licensee senior management
- Tour facility
- Hold Q&A session

Persons to Meet

Region IV personnel (see Tab 9)

- Greg Warnick, Senior Resident Inspector
- John Reynoso, Resident Inspector
- Matt Young, Acting Resident Inspector

San Onofre Nuclear Station (see Tab 8)

- Alan Fohrer, Chairman & Chief Executive Officer Southern California Edison
- Joe Sheppard, Senior Vice President and Chief Nuclear Officer, SCE
- Douglas Bauder, Vice President & Station Manager
- Tom McCool, Plant Manager
- Richard J. St. Onge, Director, Nuclear Regulatory Affairs, SCE

Activities on Site

- Meet with resident staff
- Tour facility with licensee and resident inspector
- Discuss plant performance and hold a Q&A session

Licensee's Briefing Topics for the Commissioner

- Site Engagement in the Corrective Action Program (CAP)
- Initial Quality of Cause Analyses
- Work Packages
- Long Term Asset Planning

Licensee Ownership Information

The San Onofre Nuclear Generating Station is jointly owned by Southern California Edison (78.21%), San Diego Gas & Electric (20%), and the city of Riverside (1.79%).

Directions to Doubletree-Dana Point (949) 661-1100

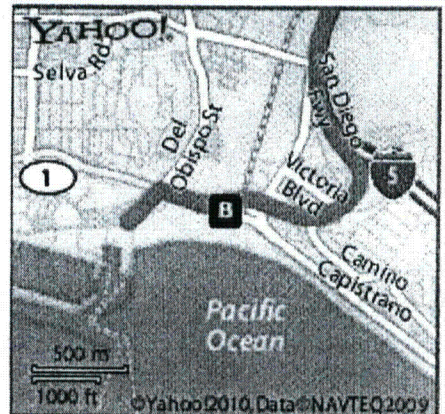
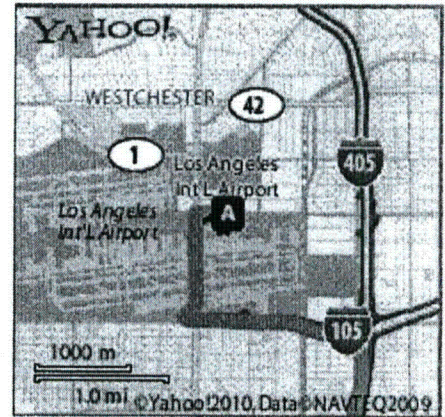
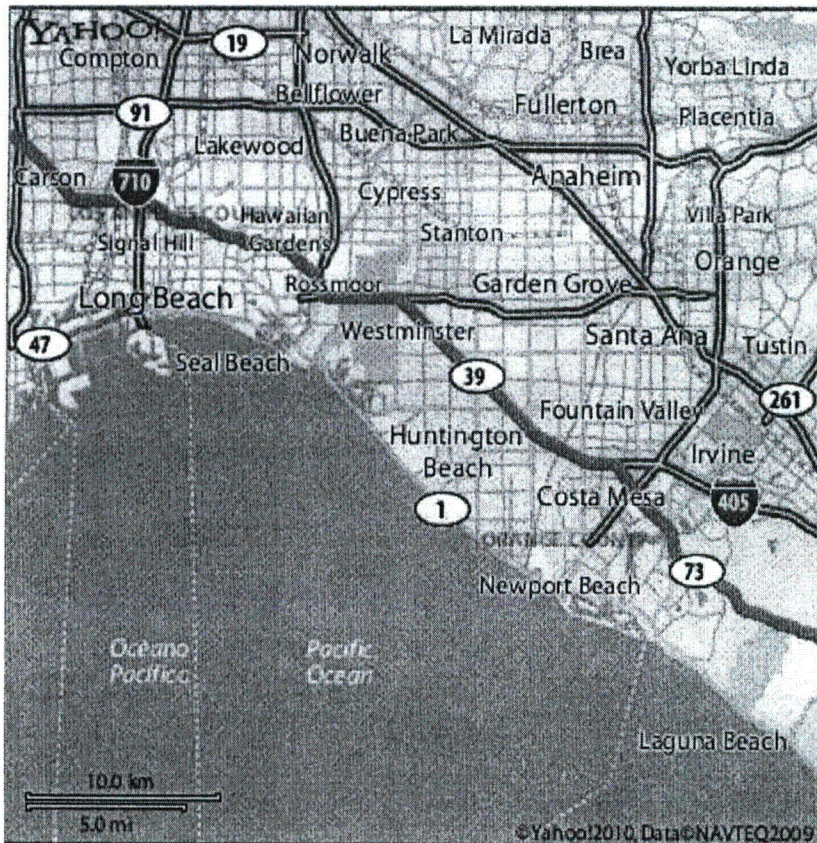
Directions to Doubletree-Dana Point (949) 661-1100

YAHOO!

Total Time: 1 hours 5 mins, Total Distance: 62.93 mi

	Distance
A 1. Start on W CENTURY BLVD going toward VICKSBURG AVE	go 0.3 mi
2. Turn L on S SEPULVEDA BLVD(CA-1 S)	go 0.85 mi
3. Take ramp onto I-105 E toward NORWALK	go 1.32 mi
4. Take the SANTA MONICA/LONG BEACH exit onto I-405 S toward LONG BEACH	go 35.02 mi
5. Take the SAN DIEGO exit onto CA-73 S (Portions toll)	go 17.4 mi
6. Exit onto I-5 S (Toll applies)	go 5.96 mi
7. Take exit #79/PACIFIC COAST HWY/CAMINO LAS RAMBLAS onto CAMINO LAS RAMBLAS(CA-1) toward PACIFIC COAST HWY	go 0.35 mi
8. Continue to follow CA-1	go 1 mi
9. Turn L on DANA POINT HARBOR DR	go 0.21 mi
10. Make a U-Turn at PUERTO PL onto DANA POINT HARBOR DR	go 0.22 mi
11. Turn R on PACIFIC COAST HWY(CA-1)	go 0.17 mi
12. Bear R on PACIFIC COAST HWY toward COAST HWY	go 0.15 mi
B 13. Arrive at 34402 PACIFIC COAST HWY, DANA POINT, on the L	

Time: 1 hours 5 mins, Distance: 62.93 mi



Directions to 33.368889, -117.555000

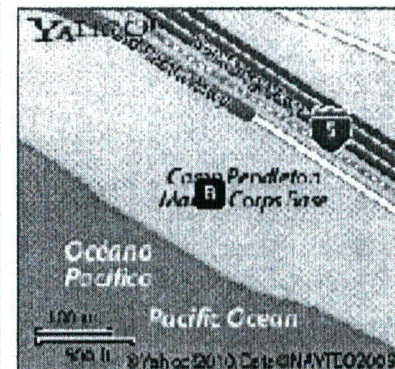
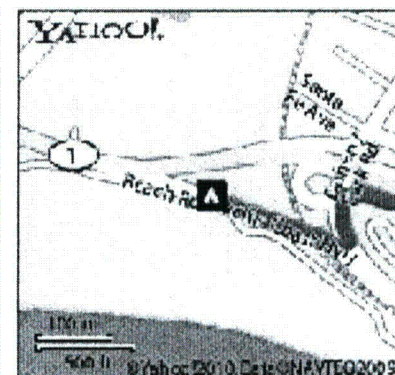
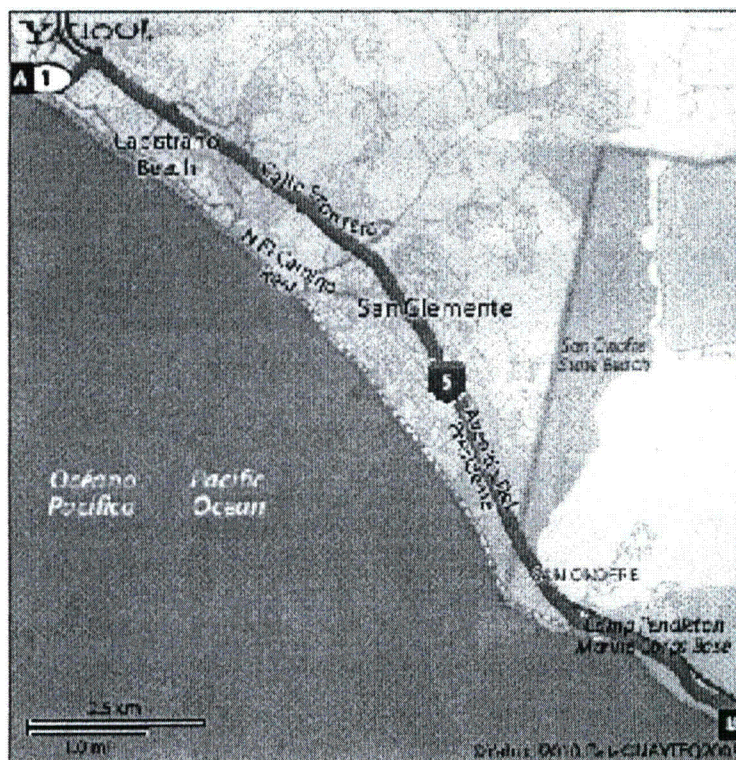
Directions to 33.368889, -117.555000

Total Time: 16 mins, Total Distance: 10.72 mi

YAHOO!

	Distance
A 1. Start at 34402 PACIFIC COAST HWY, DANA POINT going toward DOHENY PARK RD	go 0.19 mi
2. Turn L on DOHENY PARK RD	go 322 ft
3. Turn R to take ramp onto CA-1 toward SAN DIEGO FWY (I-5)	go 0.5 mi
4. Take ramp onto I-5 S toward SAN DIEGO	go 7.64 mi
5. Take exit #71/BASILONE RD/SAN ONOFRE	go 0.26 mi
6. Turn R on OLD PACIFIC HWY	go 2.06 mi
B 7. Arrive at 33.368889, -117.555000, on the R	

Time: 16 mins, Distance: 10.72 mi

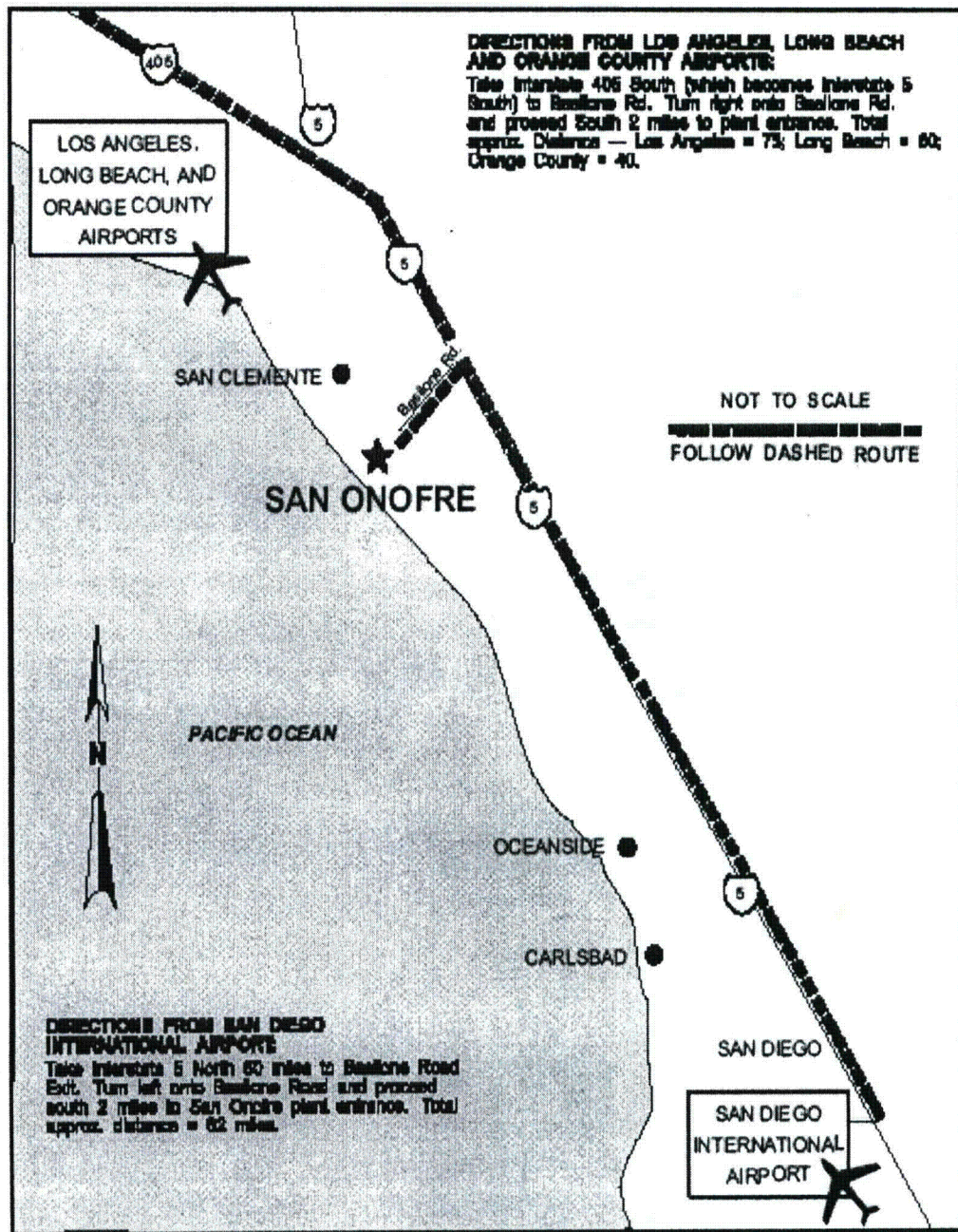


When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

PLANT: **SAN ONOFRE**

LOCATION: **San Clemente, CA**

MEMBER UTILITY: **Southern California Edison Company**



Facility Data**San Onofre Nuclear Generating Station**

Utility: Southern California Edison (SCE)*
 Location: 4 miles southeast of San Clemente, California
 County: San Diego County, California

	Unit 1**	Unit 2	Unit 3
Docket Nos.	50-206	50-361	50-362
License Nos.	DPR-13	NPF-10	NPF-15
Construction Permit	1963	10/18/1973	10/18/1973
Full Power License	03/27/1967	09/07/1982	09/16/1983
Commercial Operation	01/01/1968	08/08/1983	04/01/1984
Expiration Date	11/30/1992**	02/16/2022	11/15/2022

Plant Characteristics	Units 2 and 3
Reactor Type:	CE 2-loop
Containment Type:	Large Dry
Thermal Power Limit:	3438 MWt (1070/1080 MWe)
Architect/Engineer:	Bechtel
NSSS Vendor:	Combustion Engineering
Turbine Generator:	English Electric
Condenser Cooling Method:	Once Through
Ultimate Heat Sink for ECCS	Pacific Ocean

* San Onofre Nuclear Generating Station is jointly owned by SCE (78.21%), San Diego Gas & Electric (20%), and the city of Riverside (1.79%). SCE is authorized to act as agent for the other co-owners and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

** Unit 1, a Westinghouse 3-loop pressurized water reactor constructed by Bechtel and rated at 1347 MWt, began commercial operation on January 1, 1968, and permanently ceased operation on November 30, 1992. The unit was initially placed in SAFSTOR until 2000 when active decommissioning (DECON) began.

Facility Unique Features

Site Characteristics

SONGS is located in an area classified as Seismic Class 3 (moderate to high degree of seismic activity). The nearest fault to the site is the Christianitos Fault, which is exposed along the sea cliff approximately 1 mile southeast of Unit 1.

Ultimate Heat Sink

The safety-related service water system is the SWC system (Pacific Ocean). It cools the CCW system which is a closed loop system. CCW cools safety-related systems such as the shutdown cooling heat exchanger.

Independent Spent Fuel Storage Installation

During decommissioning of Unit 1, the fuel was originally spread between all three units' spent fuel pools. All Unit 1 fuel has now been transferred to dry cask storage (5 casks from the Unit 3 pool were loaded between October and December 2003. 9 casks from the Unit 1 pool were loaded in May 2004, and 3 casks from the Unit 2 pool were loaded in June 2005). Unit 2 & 3 fuel began being transferred to dry cask storage in 2006.

Site Location

SONGS is located on leased land from the Camp Pendleton U.S. Marine Corps Base. As a result, their local law enforcement agency (LLEA) is the FBI.

Unit 1 Reactor Vessel

The licensee originally planned to ship the Unit 1 reactor vessel to Barnwell, South Carolina for permanent storage. The licensee considered the options of shipping by rail, barge via the Panama Canal, and barge via the Cape Horn, South America. All three plans were met with significant public debate. The licensee now plans to retain the Unit 1 reactor vessel on site until Units 2 and 3 are decommissioned.

Grid Location

SONGS is in a very strategic location in the grid. The plant is located in between two major markets: Los Angeles (served by Southern California Edison) and San Diego (served by San Diego Gas & Electric). Half of the switchyard equipment is owned and controlled by these two companies.

Reactor Oversight Process (ROP) Information

Current ROP Assessment Status

The U.S. Nuclear Regulatory Commission (NRC) issued its annual assessment letter for San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 on March 3, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML100621410). The NRC staff noted that SONGS Units 2 and 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. However, the NRC continues to identify performance problems in the areas of Human Performance (HP) and Problem Identification and Resolution (PI&R). This is the fifth consecutive assessment cycle where substantive cross-cutting issues were identified in both of these cross-cutting areas. Corrective actions taken by the licensee to address these substantive cross-cutting issues have been largely ineffective.

Plant performance for Unit 2 for the most recent quarter was within the Regulatory Response Column (Column 2) 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. In December 2009, the NRC conducted supplemental NRC Inspection Manual Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," and concluded that the White finding will remain open because some corrective actions were not fully developed and because of a lack of assurance that corrective actions will be effective.

Unit 3 plant performance remained in the Licensee Response Column (Column 1) of the NRC's Action Matrix, based on all inspection findings having very low safety significance (Green) and all performance indicators indicating performance at a level requiring no additional NRC oversight (Green).

As a result of the continuing problems in HP and PI&R, the NRC plans to conduct additional inspections, above the baseline inspection program, to evaluate the effectiveness of the licensee's performance improvement efforts in these areas. Region IV has also supplemented the on-site NRC staff with a third resident inspector to support the increased level of oversight for the near-term.

Current HP cross-cutting themes are as follows:

- Failing to provide adequate design documentation, procedures, and work instructions (Resources component)
- Ineffective use of human error prevention techniques (Work practices component)
- Failing to use conservative assumptions (Decision making component)
- Weaknesses in ensuring supervisory and management oversight of work activities (Work practices component)

Current PI&R cross-cutting themes are as follows:

- Failing to thoroughly evaluate problems such that the resolutions effectively address the causes and extent of conditions (Corrective action program component)
- Weaknesses in implementing the corrective action program with a low threshold for identifying issues (Corrective action program component)

- Weaknesses in taking appropriate corrective actions to address safety issues in a timely manner commensurate with their safety significance (Corrective action program component)

A high number of allegations have been generated regarding SONGS. The current number is roughly ten times the national median. On March 2, 2010 (ADAMS Accession No. ML100601272), the NRC issued a chilling effect letter resulting from NRC's assessment of the licensee's safety conscious work environment.

On January 11, 2008 (ADAMS Accession No. ML080110380), the NRC issued a Confirmatory Order as the result of a successful alternative dispute resolution mediation session related to falsification of firewatch certification sheets. Corrective actions have been taken, and some have been effective. The NRC will perform a follow-up inspection to determine whether the terms of the Order have been satisfied.

The colored PI and inspection findings for this station can be viewed at the URLs listed below.

SONGS, Unit 2:

http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/SANO2/sano2_chart.html

SONGS, Unit 3:

http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/SANO3/sano3_chart.html

Current Issues

A. EXPECTED DISCUSSION TOPICS

The licensee proposed the following topics for discussion:

Overview of San Onofre Nuclear Generating Station Performance History
Current Regulatory Status
Station Recovery Process/Strategy
Upcoming Unit 3 Steam Generator Replacement
Safety Conscious Work Environment Update

Overview of San Onofre Nuclear Generating Station (SONGS) Units 2 and 3: Performance History and Current Regulatory Status

On March 3, 2010, the NRC issued its annual assessment letter to SCE for its performance during calendar year 2009 at SONGS Units 2 and 3 (ADAMS Accession No. ML100621410). The NRC staff noted that this is fifth consecutive cycle where substantive cross-cutting issues were identified in the areas of Human Performance (HP) and Problem Identification and Resolution (PI&R) and that corrective actions taken by the licensee to address these substantive cross-cutting issues have been ineffective. The NRC noted that, while existing performance problems have persisted at the site, new ones have emerged.

Throughout 2009, the licensee continued to have performance problems that challenged the operation of both units in the areas of HP and PI&R. Examples of these problems include the isolation of power to the wrong train of the emergency core coolant system; a reactor trip caused by the failure to follow heat treat procedures and a poor pre-job briefing, and inadequate contractor oversight to ensure procedural adherence that resulted in multiple, repeat, small fires during containment tendon cutting operations.

In 2009, the licensee's performance resulted in an increased number of NRC findings in the areas of PI&R and HP. These substantive cross-cutting issues remain open, with additional themes being identified in each area. The licensee had initiated root cause evaluations for each of the identified themes, but corrective actions have been ineffective to date. Performance problems continue to be identified by the NRC. As of the 2009 mid-cycle assessment, four themes were open; three in HP and one in PI&R. At end of cycle 2009, three additional themes were identified, one in HP and two in PI&R, with the previous four remaining open. The current total of seven open themes is the most that any plant has had in the history of the NRC's ROP evaluation process. Detailed information on the current ROP assessment for SONGS Units 2 and 3 is provided in Tab 5.

(b)(4)

Station Recovery Process/Strategy

SCE plans to discuss its ongoing performance improvement efforts at SONGS. SCE developed a Site Integrated Improvement Plan in 2008, in part, to address the performance issues identified through NRC inspection findings and in the NRC's Confirmatory Order dated January 11, 2008 (ADAMS Accession No. ML080110380). SCE has revised and expanded the improvement plan, to adjust for those previous actions that have been ineffective, and to incorporate recently identified issues (for example, the inclusion of a new Safety Culture Improvement Plan). Overall, the NRC staff remains concerned about the slow progress of the licensee's improvement efforts.

Steam Generator Replacement

SCE installed replacement steam generators (RSG) at Unit 2 during the recent refueling outage and is in the process of installing RSGs in Unit 3 during the current refueling outage. The RSGs were fabricated for both units by Mitsubishi Heavy Industries (MHI) in Japan. The Unit 2 RSGs were transported to the site in February 2009 while the Unit 3 RSGs arrived in September 2010. In March 2009, during examination of the Unit 3 RSGs in Japan, MHI detected cracking in a weld joint between the divider plate and steel head in both Unit 3 RSGs. MHI's final root cause assessment indicated that the defects were caused by the use of an air carbon-arc gouging technique on the Unit 3 RSG welds; a different process than that used for the fabrication of the Unit 2 RSGs welds. The licensee inspected the Unit 2 RSGs at the plant site and confirmed that there were no similar weld defects prior to their installation. MHI has repaired and retested the Unit 3 RSGs.

The steam generator (SG) replacement for both units requires that a large opening (roughly 28' by 28') be cut through the containment structure to allow the passage of the old and new SGs. The Unit 2 SG replacement activities have been completed, and the containment was restored and tested prior to returning the unit to operation. NRC inspectors noted some problems with work control during containment tendon removal, with design control regarding the re-welding of the containment rebar, and with quality control of concrete used in restoration of the containment structure.

Safety Conscious Work Environment Update (SCWE)

In November 2009, the NRC conducted a focused PI&R inspection to evaluate the licensee's progress in addressing the open substantive cross-cutting issues as well as to review the results of the licensee's safety culture survey. During this inspection, the NRC also conducted focus group interviews as an independent check on the licensee's results, which indicated an SCWE concern at SONGS. In February 2010, the NRC conducted additional focus group interviews of approximately 400 licensee and contractor personnel. These interviews confirmed previous NRC inspection observations of SCWE concerns at SONGS. NRC determined that SCWE issues as well as internal communication issues continue to be significant contributors to the failure of SCE to effectively address the long-standing substantive cross-cutting issues.

The NRC concluded that some employees in multiple workgroups at SONGS have the perception that they are not free to raise safety concerns using all available avenues and that management has not been effective in encouraging employees to use all available avenues without fear of retaliation. This conclusion resulted from numerous observations including (1) employees expressing difficulty or inability to use the corrective action program, (2) a lack of

knowledge or mistrust of the Nuclear Safety Concerns Program (NSCP), (3) the substantiated case of a supervisor creating a chilled work environment in his/her work group, and (4) a perceived fear of retaliation for raising safety concerns.

The NRC issued a chilling effect letter on March 2, 2010 (ADAMS Accession No. ML100601272), as a result of NRC's assessment of the licensee's SCWE. The purpose of the chilling effect letter is to verify that the licensee is taking appropriate actions to ensure that SONGS is a workplace that fosters an environment where employees feel free, and are encouraged, to raise safety concerns. The chilling effect letter requested SCE to take 13 specific actions to respond to the identified SCWE concerns.

Through several inspections and interviews with hundreds of plant employees through focus groups, the NRC staff determined that safety concerns are being raised by SONGS personnel through some communication avenues despite the staff's concerns regarding the chilled work environment. The NRC has not identified any safety issues that were not reported by some available avenue. The NRC determined that some employees do not consider certain avenues available, such as discussing a concern with their immediate supervisor, but would find an alternate avenue to communicate their safety concerns.

Operating Status

Unit 2 is currently operating at 100 percent power. The unit returned to operation on April 8, 2010, following an extended outage. Major outage activities included the replacement of both SGs. The outage, originally scheduled to last approximately 3 months, exceeded 6 months in duration due, in part, to several emergent issues (b)(5)

(b)(5)

Unit 3 is currently in a refueling outage. This outage includes replacement of both SGs similar to what was accomplished in Unit 2. The start of the Unit 3 outage was delayed by approximately 2 weeks from its original schedule. This delay was intended, in part, to provide time to implement actions designed to prevent problems with work planning and execution, design control, and contractor oversight similar to those experienced during the Unit 2 outage.

B. OTHER TOPICS OF INTEREST

Plant Equipment Issues

- Degraded connection between battery and output breaker. White finding from December 2008 left open because corrective actions not fully developed and there was a lack of assurance that corrective actions would be effective.
- Schedule 10 piping integrity issues. Multiple instances of piping degradation identified on refueling water tank to ECCS/charging suction piping in both Units 2 and 3. Inspections focused on adequacy of past corrective actions for identified deficiencies, adequacy of past inspections, ongoing operability evaluations, and corrective actions going forward.

Current Licensing Issues

On March 16, 2010 (ADAMS Accession No. ML100630514), the NRC staff granted SCE an exemption to certain new security requirements in Title 10 of the *Code of Federal Regulations*, Section 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," issued by NRC in a final rule dated March 27, 2009 (74 FR 13926). The exemption allowed SCE to extend the implementation date from the current deadline of March 31, 2010, to October 31, 2010, for one specific requirement and to January 31, 2011, for a second specific requirement. The exemption will allow the licensee sufficient time to complete the modifications designed to update aging security equipment and incorporate state-of-the-art technology to meet the new regulatory requirements.

On December 15 and 17, 2009, (ADAMS Accession Nos. ML093220105 and ML090860415, respectively), the NRC staff approved a license amendment and a related exemption, respectively, which allow SCE to use an alternative computer code to perform nuclear design calculations. The amendment and exemption also allow SCE to use a limited number of Areva Lead Fuel Assemblies in SONGS Units 2 and 3 over the next three operating cycles.

On March 22, 2010, (ADAMS Accession No. ML100620983), the NRC staff approved changes to the emergency action levels for SONGS in support of the conversion from the current scheme to a scheme based on NEI 99-01, "Methodology for Development of Emergency Action Levels," Revision 5, dated February 22, 2008.

SCE plans to submit a license amendment request in late 2010 for a major upgrade to the SONGS technical specifications to better align with the current Combustion Engineering Improved Standard Technical Specifications.

Management Changes

SCE has made many senior management changes over the past 2 years. These changes include the positions of Senior Vice President and Chief Nuclear Officer (Joe Sheppard); Site Vice President (Doug Bauder); Plant Manager (Tom McCool); Director, Operations (Bill Pourier); Director, Maintenance and Construction (Ed Hubley); Director, Work Control (David Spires); Director, Recovery (Jim Madigan); and Director, Nuclear Regulatory Affairs (Rich St. Onge). The organization chart provided in Tab 7 shows the large number of management changes and further indicates that many of the new managers came from outside of SCE.

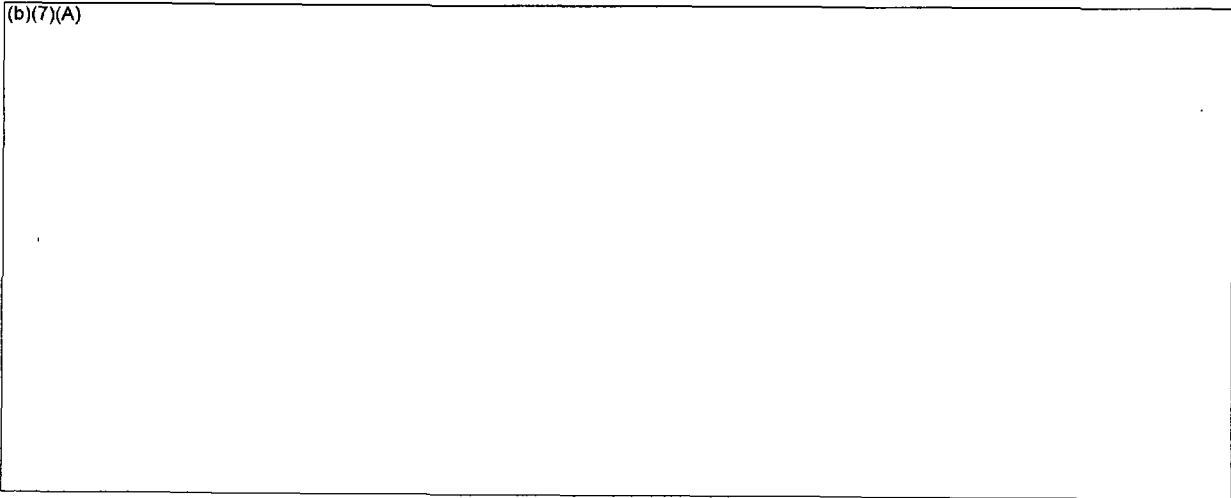
License Renewal Activities

SCE has not formally announced its intent to seek renewal of the operating licenses for SONGS Units 2 and 3. However, SONGS is a participant in the Strategic Teaming and Resource Sharing (STARS) group of utilities, and STARS has notified the NRC staff that several unspecified members intend to submit renewal applications in FY 2013.

Open Investigations

The following are examples of items under review by the Office of Investigations (OI):

(b)(7)(A)

**Open Allegations**

The NRC has received a significant increase in allegations from onsite sources at SONGS to nearly ten times the industry median (4) in 2009. Forty-three allegations have been received thus far this year. During this time, there was a significant increase in chilling effect, discrimination, and anonymous concerns raised to the NRC as compared to prior years. These allegations were received from multiple onsite organizations.

- There are currently 38 open allegations at SONGS.
- A large number of these were originated during the Unit 2 SG replacement outage.
- There are 13 open allegations associated with discrimination complaints.
- There are 10 open allegations associated with SCWE concerns at SONGS.
- There are approximately 18 allegations associated with OI investigations or alternate dispute resolution.

Harassment And Intimidation Issues

As discussed in Section A above, the NRC issued a chilling effect letter on March 2, 2010, after a spike in the number of allegations and after the NRC performed an assessment of SCWE issues at SONGS.

Congressional Interest

There has been a high level of Congressional interest in SONGS. The Office of Congressional Affairs staff has responded to recent inquiries from Congressman Calvert's (R-CA) office, Congressman Markey's (D-MA) office, and staff from the Senate Committee on Environment and Public Works, chaired by Senator Boxer (D-CA). The primary issues of interest include the work environment and high number of allegations at the site and the delays in restarting Unit 2. On August 6, 2009 (ADAMS Accession No. ML092050535), the Executive Director for Operations responded to a letter from Senator Boxer concerning the SG replacement activities at Unit 2.

State Issues

State and local officials have also expressed recent interest in activities at SONGS. On February 24, 2010, Region IV staff briefed staff from the California Energy Commission on SONGS performance and safety culture issues. On February 2, 2010, the NRC Senior Resident Inspector made a presentation to the San Clemente City Council on the NRC's regulatory role and its views on SCE's safety performance at SONGS.

2.206 Petitions

None.

Selected News Articles**Edison Looking To Hire 1,000 For Upcoming San Onofre Steam Generator**

Replacement. The Inland Valley (CA) Daily Bulletin (10/9, Galindo, 49K) reported that Southern California Edison has already started hiring for a "major project to replace steam generators in the San Onofre Nuclear Generating Station near San Clemente. 'We've been hiring craftsmen, engineers and other specialists,' Edison spokesman Gil Alexander said," and added that Edison "expects to hire 1,000 temporary workers from all around Southern California as work on the project is expected to commence this month." The Daily Bulletin adds, "Alexander said Edison plans to shut down one of two reactor units at the plant for three to four months to replace the plant's steam generators, the plant's largest components. 'After 28 years, the steam generators have reached the end of their service,' Alexander said."

New Chief At San Onofre Station Juggles Upcoming Retrofit, NRC Attention. A profile piece for the San Diego Union-Tribune (10/8, Soto) reports on Joe Sheppard, who "was named interim chief nuclear officer of the San Onofre Nuclear Generating Station a month ago," he "took on a plant in the middle of a major revamp and one facing criticism from federal regulators." Sheppard, a veteran nuclear plant manager "told his new bosses he wouldn't sit still. ... 'I enjoy what I do every day, but I've done it for 40 years,' he said." Sheppard "took the job from Ross Ridenoure, who left for unspecified reasons in September, with the company saying only that it was 'in the best interest of the station.'" But the upcoming retrofit is "not the only thing on Sheppard's mind." NRC officials "said the plant was getting nearly 10 times as many complaints than an average nuclear facility," and "Sheppard said he knows of the concerns and is working on them."

San Onofre's New Chief Nuclear Officer Says Plant Needs To Improve. The San Clemente (CA) Times (9/24, Swayne) reports that while the San Onofre Nuclear Generating Station has "been under increasing pressure from regulators, and some members of the public, changes have been underway in how it is managed, how it operates and even in the waters near the ocean-front plant." New San Onofre interim Chief Nuclear Officer, James Sheppard "doesn't mince words when it comes to the performance of the San Onofre Nuclear Generating Station. 'SONGS doesn't meet the standards set in our industry,' Sheppard said. 'That doesn't mean the plant is unsafe' or that it 'is staffed by bad people. Our standards are very, very high' and while there 'are things at SONGS that we do better than anyone else in the industry' there are 'things we have to learn.'"

NRC Resident Inspector Notes San Onofre Plant "Improvement." The Orange County (CA) Register (9/17, Swegles) reports, "Federal inspectors said Thursday night that Southern California Edison is responding to calls to upgrade safety consciousness at the San Onofre Nuclear Generating Station. 'I've been at the site now for 2 ½ years and I could not tell you that I have not seen improvement,' Greg Warnick, the Nuclear Regulatory Commission's senior resident inspector at San Onofre, said at a public meeting" last week. "'In fact, I've seen a lot of improvement.' ... Warnick said worker complaints there remain at a high level. In March, the NRC took the unusual step of issuing a 'chilling effects' letter advising Edison that San Onofre was producing nearly 10 times the median for worker allegations at a nuclear power plant." But new chief nuclear officer at San Onofre, Joe Sheppard, said "You build trust slowly."

NRC Resident Inspector Says Some San Onofre Employees Still Fear To Speak Up. In covering the NRC hearing Thursday to discuss San Onofre employees' fear of retaliation if they report problems, the North County (CA) Times (9/17, Sisson) noted that during the hearing, San Onofre "Station's chief resident inspector said Thursday that he still encounters employees who do not trust management enough to report problems at the plant, despite a rare and especially stern warning from regulators in March. 'It's pretty evident to us that you need to continue to build trust,' said Greg Warnick, the Nuclear Regulatory Commission's top inspector at San Onofre." The Times adds, "Several top executives said they have taken numerous steps, from small meetings throughout the plant, to moving the office where employees can report problems to a more central location," but according to Warnick, despite those changes, "he and other on-site inspectors continue to hear from employees who fear retaliation for speaking up."

NRC To Discuss Safety Culture Issues With San Onofre Station Operators. According to the San Clemente (CA) Times (9/3), "The Nuclear Regulatory Commission will hold a public meeting on September 16 to discuss the status of progress made in addressing safety culture issues at the San Onofre nuclear plant, south of San Clemente." The meeting at the Dana Point Doubletree Guest Suites Hotel "between NRC staff and Southern California Edison Co. (SCE) officials will be held from 6 to 9:00 pm." SCE "officials will brief the NRC on their actions and progress made to address safety conscious work environment issues at the plant."

Adds the Orange County (CA) Register (9/3, Swegles), during the September 16 meeting in Dana Point Nuclear Regulatory Commission staff will "hear a report from Southern California Edison on its actions to 'address safety-conscious work-environment issues' at the San Onofre Nuclear Generating Station. 'Southern California Edison officials will brief the NRC on their actions and progress made to address safety-conscious work-environment issues at the plant,' an NRC news release said." The "NRC is investigating concerns expressed by some power-plant workers in the past year."

New Chief Nuclear Officer Hired At San Onofre. The North County (CA) Times (9/3) reports, "Southern California Edison has named a new chief nuclear officer to oversee operations at the San Onofre Nuclear Generating Station. Edison released a brief statement Thursday afternoon naming 40-year industry veteran James 'Joe' Sheppard as the plant's top manager during 'a transitional period while the company seeks a long-term station leader.'" Sheppard replaces Ross Ridenoure, "the plant's former chief nuclear officer" who was brought on in 2008 "to address safety culture issues," but who, "according to an Edison spokesman, stepped down 'in the best interests of the station.'"

Artificial Reef Thrives Off Coast Of San Onofre. According to the boating and fishing news outlet, The Log (CA) Newspaper (9/1, Brody), "The man-made kelp bed created by Southern California Edison (SCE) off the Southern Orange County coast is lush with seaweed that

provides a home for a wide variety of marine life." SCE says the "project has surpassed scientists' expectations" and the "174-acre artificial reef has continued to thrive since its creation in 2008. The \$46 million SCE project was intended to attract marine life to offset the San Onofre Nuclear Generation Station and its cooling water intake system's impact on fish and other ocean creatures in the area."

California To Phase Out Once-Through Cooling For Plants. San Luis Obispo (CA) New Times (5/5/2010, Rigley, 42K) reports, "The State Water Resources Control Board unanimously approved regulations that require 19 coastal power plants to phase out once-through cooling," which the article described as the "preferred" system for coastal plants. The ruling was made to prevent ocean life from being drawn into intake pumps. Although some plants now have until 2015 to comply, "nuclear power plant operators, however, got a bit more leeway from the water board. Board members required that an independent third party of nuclear experts review the cost feasibility and come back with results in three years." This may "lead to a 'variance' for nuclear power plant operators, Pacific Gas and Electric spokeswoman Cindy Pollard said."

Reuters (5/6/2010) notes some of the plants are possibly closing because of the ruling. The measure includes both of California's nuclear power plants. NPR (5/5/2010) "Morning Edition," in a report from KQED, notes "Alternatives to once-through cooling are expensive, especially at nuclear power plants like San Onofre," owned by Southern California Edison. Spokesperson Mike Hertel said, "I want to stress that we don't think it's even feasible. But if it were, it would cost in the range of say \$2.5 billion to \$3 billion." Hertel "says it's too soon to say how the industry here will respond." According to the KPBS-Radio (5/5, Joyce) website, "Instead of a complete cooling system overhaul, plant operators favor greater flexibility to outfit their existing equipment with environmentally-friendly features." Hertel "said there simply is no room on the San Onofre site to install a cooling tower, which is the mechanism preferred by environmental advocates."

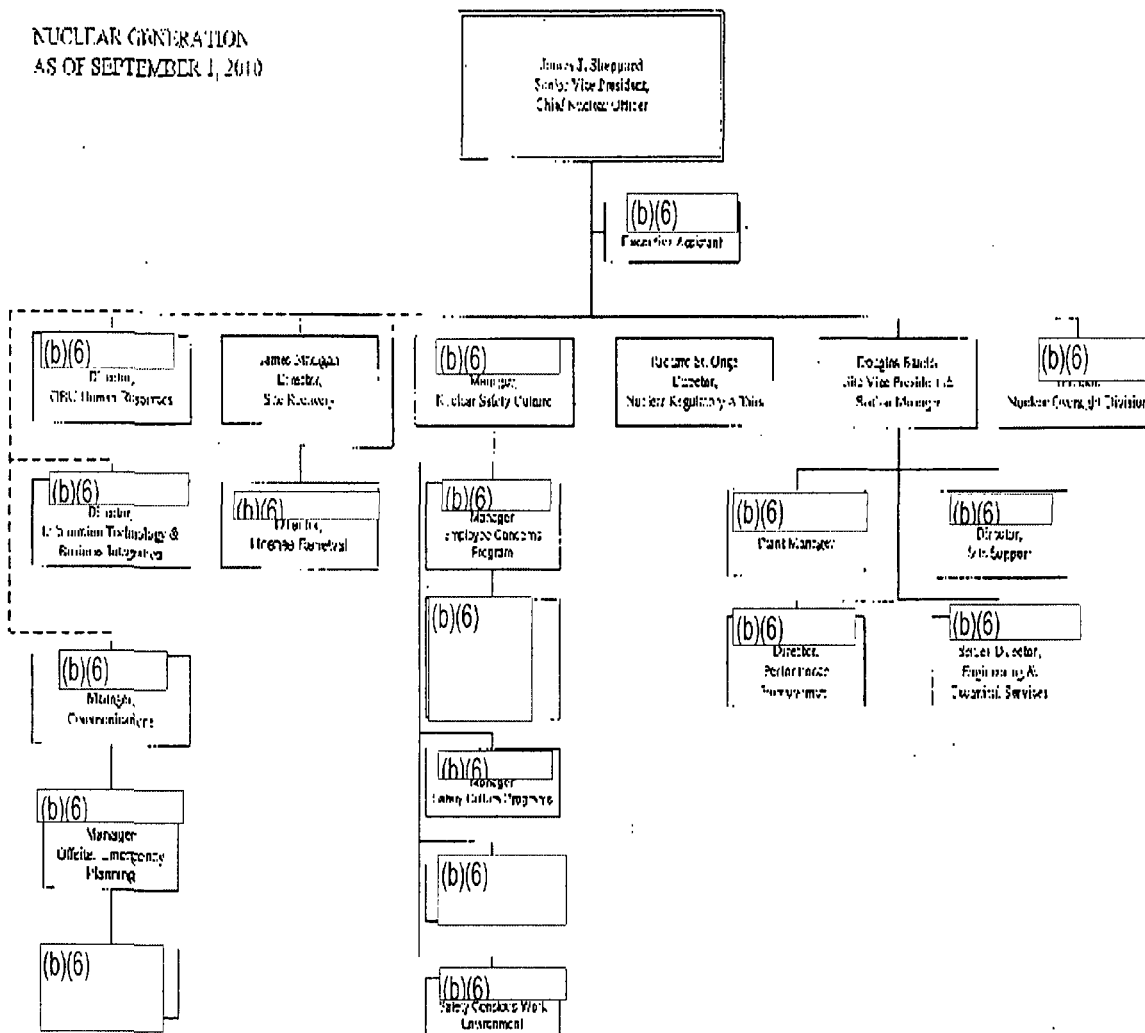
Significant Reportable Events and Activities

None.

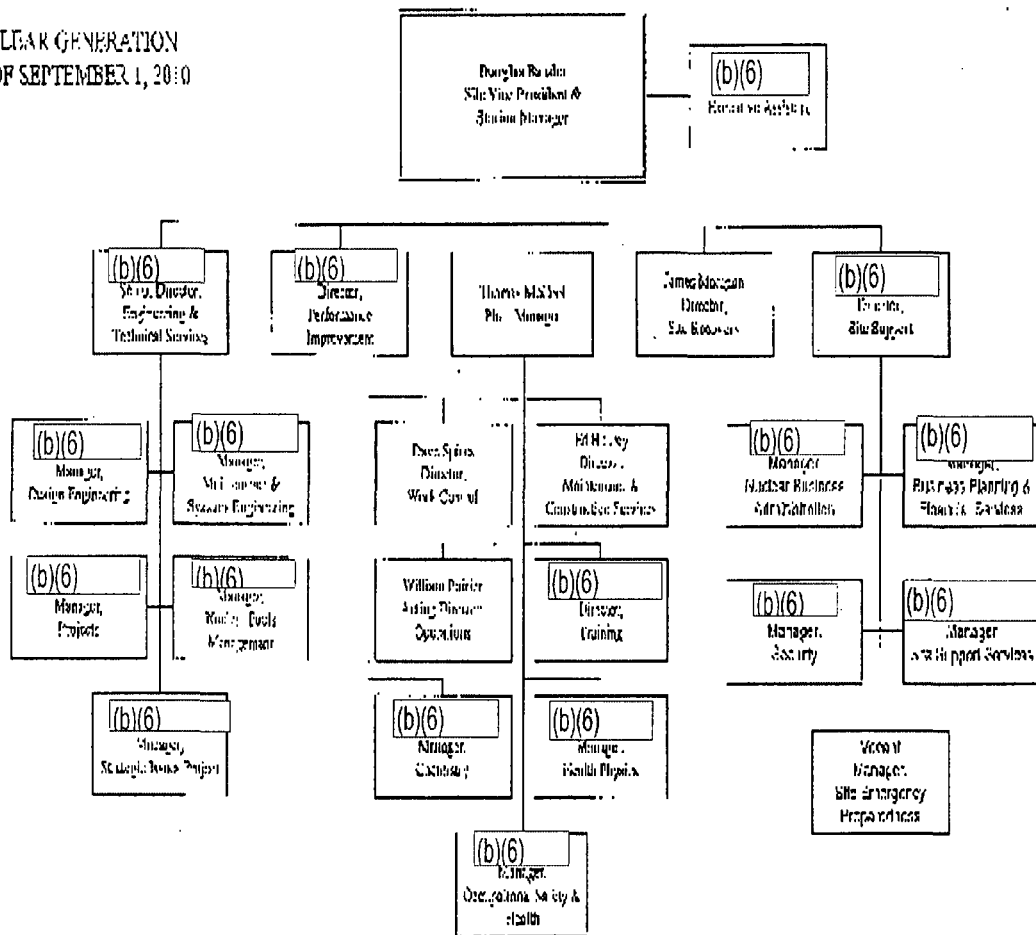
FACILITY ORGANIZATION

SAN ONOFRE NUCLEAR GENERATING STATION

NUCLEAR GENERATION
AS OF SEPTEMBER 1, 2010



NUCLEAR GENERATION
AS OF SEPTEMBER 1, 2010



Biographical Data of Principal Managers

(as provided by the licensee)

The biographical data for the following are attached:

- Alan Fohrer, Chairman & Chief Executive Officer, SCE
- Joe Sheppard, Senior Vice President and Chief Nuclear Officer, SCE
- Douglas Bauder, Vice President & Station Manager
- Thomas McCool, Plant Manager
- Richard J. St. Onge, Director, Nuclear Regulatory Affairs, SCE



Alan J. Fohrer

Chairman & Chief Executive Officer
Southern California Edison

Alan J. Fohrer is chairman & chief executive officer of Southern California (SCE), one of the country's largest electric utilities. Fohrer was elected CEO on January 1, 2002 and was elected chairman on June 12, 2007. Fohrer has extensive knowledge and management experience in every aspect of SCE's business.

Previously, Fohrer was president and chief executive officer of Edison Mission Energy (EME), a subsidiary of Edison International that owns and operates independent power production facilities, having been elected to that position in January 2000.

Before his leadership at EME, Fohrer was executive vice president and chief financial officer of parent company Edison International. Previously, he held the same position for a number of years at SCE.

Fohrer began his Edison career in 1973 in SCE's Civil Engineering Department. In 1980, he moved to the Treasurer's Department, where he held a number of positions, including financial planning supervisor, financial planning and banking manager, corporate planning and budgeting manager, and assistant treasurer.

He was elected vice president, treasurer and chief financial officer at SCE in 1991 and in 1993, he was promoted to senior vice president, treasurer and chief financial officer of both SCE and Edison International.

Fohrer is a member of the Engineering School Board of Councilors of the University of Southern California. He is also a member of the board of directors of Montgomery Watson Harza, Inc.; Blue Shield of California; San Gabriel Valley Council Boy Scouts of America; California Science Center; California Chamber of Commerce; and the Institute of Nuclear Power Operations (INPO).

Fohrer earned B.S. and M.S. degrees in civil engineering from the University of Southern California, and an M.B.A. from California State University, Los Angeles.

Updated September 2009



SOUTHERN CALIFORNIA
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James "Joe" Sheppard

Senior Vice President and Chief Nuclear Officer
Southern California Edison

James "Joe" Sheppard is senior vice president and chief nuclear officer of Southern California Edison (SCE). He also serves as a consultant on nuclear generation issues to the chief executive officer and board of directors of Edison International, SCE's parent company.

Prior to joining SCE, Sheppard was president and chief executive officer of the South Texas Project Nuclear Operating Company (STPNOC) from 2003 to 2009. STPNOC is jointly owned by NRG Energy, CPS Energy and Austin Energy. Before assuming that role, he served in a number of STPNOC management roles including vice president of Engineering and Technical Services, vice president of Business Systems, and general manager of Nuclear Licensing.

Before working at STPNOC, Sheppard was president and chief executive officer at Sequoyah Fuels Corporation and was responsible for plant operations of the company's uranium conversion plant. Prior to joining Sequoyah Fuels, Sheppard served as operations manager and general manager of the Robinson Nuclear Project, owned by Carolina Power & Light.

Sheppard is a graduate of the U.S. Naval Academy and Duke University. He is a licensed Senior Reactor Operator and a graduate of the Institute of Nuclear Power Operations' Senior Nuclear Plant Management course and Senior Nuclear Executives seminar. He is a member of the American Nuclear Society and was awarded that organization's Utility Leadership Award in 2004. In 2009, Sheppard was awarded the Nuclear Energy Institute's William S. Lee award for leadership.

Updated September 2010



Douglas Bauder

**Vice President & Station Manager
San Onofre Nuclear Generating Station
Southern California Edison**

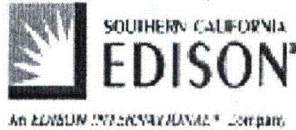
Douglas R. Bauder is vice president for Southern California Edison (SCE) and station manager for the San Onofre Nuclear Generating Station (SONGS), responsible for the strategic oversight of the plant operation and maintenance.

Bauder joined SCE in February 2009 as plant manager for SONGS, responsible for day-to-day plant activities associated with the operation and maintenance of SONGS.

Prior to joining SCE, Bauder served as plant general manager for Calvert Cliffs Nuclear Power Plant in Maryland. During his 20 years at Calvert Cliffs, he handled all aspects of plant management and implemented a site excellence plan and standard integrated program that directly contributed to improved human business performance functions.

Bauder served as a United States Naval Submarine Officer in Norfolk, Virginia.

Updated May 2010



Thomas McCool

**Plant Manager,
Southern California Edison**

Tom McCool joined the San Onofre Nuclear Generating Station (SONGS) leadership team as Plant Manager on July 26, 2010. McCool is responsible for the day-to-day plant activities associated with the operation and maintenance of SONGS.

Prior to joining SCE, McCool served for the last six years as Maintenance Director and Operations Director at Braidwood Station and Corporate Training Director for Exelon Nuclear. McCool also served as Assistant Production Manager at DC Cook Nuclear Plant, Assistant Nuclear Shift Supervisor at Beaver Valley Power Station, and Senior Training Instructor at Waterford.

He began his 25-plus year career in nuclear receiving a BS in Marine Engineering from Maine Maritime Academy in Castine, Maine. He has held several Senior Reactor Operator licenses, and has completed both Exelon's Advanced Management Program in 2006 and INPO's Senior Plant Manager Course in 2008.



Richard J. St. Onge

Director, Nuclear Regulatory Affairs
Southern California Edison

Mr. Richard St. Onge is currently the Director of Regulatory Affairs at the San Onofre Nuclear Generating Station (SONGS), which is owned and operated by Southern California Edison (SCE). Previously, Mr. St. Onge held the position of Director, Maintenance and Systems Engineering at SONGS. He has been a licensed Senior Reactor Operator/Control Room Supervisor at the facility. Mr. St. Onge has held various other positions: with a NSSS supplier (Combustion Engineering), at the Pilgrim Nuclear Station, and in reactor refueling services, plant, system and design engineering.

Mr. St. Onge is a Registered Professional Engineer, State of California, Nuclear Engineering. Mr. St. Onge also is an Executive Member of the Operations & Power Division of the American Nuclear Society. Mr. St. Onge holds a Bachelor of Science Degree in Nuclear Engineering and a Masters Degree in Business Administration.

RESUMES OF RESIDENT INSPECTORS
SAN ONOFRE NUCLEAR GENERATING STATION

Greg Warnick

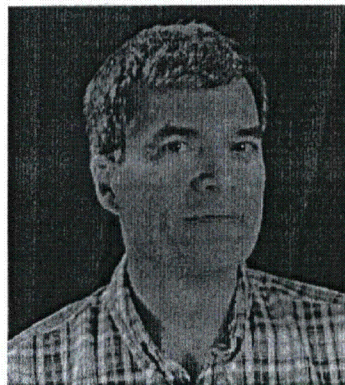


Senior Resident Inspector – San Onofre Nuclear Generating Station

Greg first joined the NRC in 1997, as a project engineer in Region II. In 1998, Greg was assigned as resident inspector at the St. Lucie Nuclear Power Plant in St. Lucie, FL. In December 2000, Greg transferred to Region IV and was assigned as resident inspector at the Palo Verde Nuclear Generating Station in Tonopah, AZ. In 2004, Greg was promoted to the position of senior resident inspector at Palo Verde. In May 2008, Greg was assigned as senior resident inspector at San Onofre Nuclear Generating Station in San Clemente, CA. Prior to joining the NRC, Greg was employed as a nuclear plant engineer with Lockheed Martin - Knolls Atomic Power Laboratory, Inc. Greg graduated from Brigham Young University with a Bachelor of Science degree in Mechanical Engineering in (b)(6) Greg and his family (b)(6)

(b)(6)

John Reynoso



Resident Inspector – San Onofre Nuclear Generating Station

Mr. John Reynoso became the Resident Inspector at the San Onofre Nuclear Generating Station in April 2008. Mr. Reynoso joined the agency January 2005 with many years of nuclear industry experience, including being a licensed Senior Reactor Operator and System Engineer at two separate nuclear power plants. Prior to his commercial nuclear industry experience, Mr. Reynoso

(b)(6)

Mr. Reynoso has a Master of Business Administration in Information Technology and Bachelor of Science degree in Engineering from the University of Arizona. He began his NRC career in the Division of Reactor Safety Engineering Branch in Region IV. Since becoming a reactor inspector, he served as a team leader on a Component Design Basis Inspection (CDBI) and on baseline in-service inspections. He was assigned to the Response Coordination Branch in May 2007 and was qualifying as a Regional Operations Officer before accepting his resident inspector position.

Matt Young



Acting Resident Inspector – San Onofre Nuclear Generating Station

Mr. Matt Young arrived at the San Onofre Nuclear Generating Station on October 25, 2010. Mr. Young joined the agency in June 2006. Mr. Young completed a three month rotation to San Onofre in 2007 while completing his NSPD program.

Mr. Young earned his a Master of Science in Nuclear Engineering in (b)(6) and Bachelor of Science degree in both Nuclear Engineering and Mechanical Engineering, all from Pennsylvania State University in (b)(6). Since becoming a reactor inspector, he has been the team leader for an in-service inspection and performed Component Design Bases Inspections.