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

May 13, 2011

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

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION – NRC TEMPORARY INSTRUCTION 2515/183 INSPECTION REPORT 05000361/2011009 and 05000362/2011009

Dear Mr. Dietrich:

On April 29, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your San Onofre Nuclear Generating Station (SONGS), using Temporary Instruction 2515/183, "Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event." The enclosed inspection report documents the inspection results which were discussed on May 3, 2011, with Mr. D. Yarbrough, Director, Plant Operations, and other members of your staff.

The objective of this inspection was to assess the adequacy of actions taken at SONGS in response to the Fukushima Daiichi Nuclear Station fuel damage event. The results from this inspection, along with the results from similar inspections at other operating commercial nuclear plants in the United States, will be used to evaluate the United States nuclear industry's readiness to respond to a similar event. These results will also help the NRC to determine if additional regulatory actions are warranted.

All of the potential issues and observations identified by this inspection are contained in this report. The NRC's Reactor Oversight Process will further evaluate any issues to determine if they are regulatory findings or violations. Any resulting findings or violations will be documented by the NRC in a separate report. You are not required to respond to this letter.

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 component of NRC's document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

***/RA/ By Donald B. Allen for***

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

Docket Nos. 50-361
50-362
License Nos. NPF-10
NPF-15

Enclosure:
NRC Inspection Report 05000361/2011009 and 05000362/2011009
w/Attachment: Supplemental Information

cc w/Enclosure:

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|---|---|---|---|---|---|
| SUNSI Rev Compl. | ☒ Yes ☐ No | ADAMS | ☒ Yes ☐ No | Reviewer Initials | DBA |
| Publicly Avail | ☒ Yes ☐ No | Sensitive | ☐ Yes ☒ No | Sens. Type Initials | DBA |

| RI:DRP/D | SRI:DRP/D | DRS/TSB | C:DRP/D | |
|---|---|---|---|---|
| JPReynoso | GGWarnick | EARuesch | RELantz | |
| DBA for-E | DBA for-E | ***/RA/*** | DBA for | |
| 05/11/2011 | 05/11/2011 | 05/11/2011 | 05/12/2011 | |

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**U. S. NUCLEAR REGULATORY COMMISSION**
**REGION IV**

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|---|---|
| Docket: | 50-361, 50-362 |
| License: | NPF-10, NPF-15 |
| Report: | 05000361/2011009 and 05000362/2011009 |
| Licensee: | Southern California Edison Co. |
| Facility: | San Onofre Nuclear Generating Station, Units 2 and 3 |
| Location: | 5000 S. Pacific Coast Hwy<br>San Clemente, California |
| Dates: | March 23 through April 29, 2011 |
| Inspectors: | G. Warnick, Senior Resident Inspector<br>J. Reynoso, Resident Inspector<br>Z. Hollcraft, Project Engineer<br>J. Tapp, Resident Inspector |
| Approved By: | Ryan E. Lantz, Chief, Project Branch D<br>Division of Reactor Projects |

## SUMMARY OF FINDINGS

IR 05000361/2011009 and 05000362/2011009, 03/23/2011 – 04/29/2011; San Onofre Nuclear Generating Station, Units 2 and 3, Temporary Instruction 2515/183 - Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event.

This report covers an announced temporary instruction inspection. The inspection was conducted by Resident and Region IV inspectors. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

## INSPECTION SCOPE

The intent of the temporary instruction is to be a high-level look at the industry's preparedness for events that may exceed the design basis for a plant. The focus of the temporary instruction was on (1) assessing the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats; (2) assessing the licensee's capability to mitigate station blackout conditions; (3) assessing the licensee's capability to mitigate internal and external flooding events required by station design; and (4) assessing the thoroughness of the licensee's walk downs and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. If necessary, a more specific follow-up inspection will be performed at a later date.

## INSPECTION RESULTS

The following table documents the NRC inspection at San Onofre Nuclear Generating Station, Units 2 and 3, performed in accordance with Temporary Instruction 2515/183. The numbering system in the table corresponds to the inspection items in the temporary instruction.

| **03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats, committed to as part of NRC Security Order Section B.5.b issued February 25, 2002, and severe accident management guidelines and as required by Title 10 of the Code of Federal Regulations (10 CFR) 50.54(hh). Use Inspection Procedure 71111.05T, "Fire Protection (Triennial)," Section 02.03 and 03.03 as a guideline. If Inspection Procedure 71111.05T was recently performed at the facility the inspector should review the inspection results and findings to identify any other potential areas of inspection. Particular emphasis should be placed on strategies related to the spent fuel pool. The inspection should include, but not be limited to, an assessment of any licensee actions to:** | |
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| Licensee Action | Describe what the licensee did to test or inspect equipment. |
| a. Verify through test or inspection that equipment is available and functional. Active equipment shall be tested and passive equipment shall be walked down and inspected. It is not expected that permanently installed equipment that is tested under an existing regulatory testing program be retested.<br><br>This review should be done for a reasonable sample of mitigating strategies/equipment. | The licensee walked down all equipment used to implement strategies associated with Security Order Section B.5.b and unique to severe accident management guidelines using surveillance or implementation procedures. All permanent plant equipment and non-permanent passive equipment for strategies associated with B.5.b and unique to severe accident management guidelines were verified available and functional. All non-permanent active equipment for strategies associated with B.5.b and severe accident management guidelines was tested. |
| | Describe inspector actions taken to confirm equipment readiness (e.g., observed a test, reviewed test results, discussed actions, reviewed records, etc.). |
| | The inspectors reviewed all inspection records and test results associated with this verification activity; conducted multiple walkdowns, both independently and in conjunction with licensee personnel, of all major B.5.b contingency response equipment staged throughout the site; and observed the performance of the monthly functional and annual flow/pressure test on skid mounted fire pump SA2301MP1058.<br><br>The inspectors reviewed the results from the Triennial Fire Protection Inspection completed for Units 2 and 3 in August 2010, as documented in NRC Inspection Report 05000361/2010007; 05000362/2010007. A licensee-identified violation was identified related to one strategy that relied on skid mounted fire pump SA2301MP1058. The inspectors observed that the identified |

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| | | condition had been adequately corrected during their observation of the monthly functional and annual flow/pressure test. |
| | | Discuss general results including corrective actions by licensee. |
| | | Equipment used to implement strategies associated with B.5.b and severe accident management guidelines was generally available and functional. Minor deficiencies and several improvement opportunities were identified by the licensee and entered into the corrective action program. |
| Licensee Action | | Describe the licensee's actions to verify that procedures are in place and can be executed (e.g. walkdowns, demonstrations, tests, etc.) |
| b. Verify through walkdowns or demonstration that procedures to implement the strategies associated with Security Order Section B.5.b and 10 CFR 50.54(hh) are in place and are executable. Licensees may choose not to connect or operate permanently installed equipment during this verification.<br><br>This review should be done for a reasonable sample of mitigating strategies/equipment. | | The licensee verified that B.5.b notebooks were at the required mustering locations. The B.5.b and severe accident management guidelines procedures were walked down by qualified personnel from the fire department, operations, and maintenance, as applicable and verified executable.<br><br>The licensee identified the corrective action program was tracking a new revision to provide clarification and betterment for one procedure associated with B.5.b strategies. |
| | | Describe inspector actions and the sample strategies reviewed. Assess whether procedures were in place and could be used as intended. |
| | | The inspectors performed a review of B.5.b notebooks at several of the mustering locations to verify that the procedures were in place with the appropriate administrative controls. The inspectors reviewed the scope of the licensee's walkdown and demonstration efforts and associated results. Walkdowns were conducted, both independently and in conjunction with licensee personnel, of the following sample strategies: |

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| | | • Spent fuel pool makeup – internal strategy;<br>• Spent fuel pool makeup – external strategy;<br>• Manually depressurize steam generators and fill with a portable pump;<br>• Manual operation of turbine-driven auxiliary feedwater pump; and<br>• Manually opening main feedwater isolation valves<br><br>The walkdowns, in part, were performed to ensure the licensee's familiarity with the operation of the equipment, storage locations of portable equipment, and locations of permanently installed equipment. |
| | | Discuss general results including corrective actions by licensee. |
| | | The inspectors determined that procedures to implement the strategies associated with B.5.b and severe accident management guidelines were generally in place and executable. Issues associated with the administrative controls of these procedures at the designated mustering locations were identified and entered into the corrective action program. Other deficiencies and improvement opportunities were identified by the licensee and entered into the corrective action program. The inspectors plan to conduct a further inspection on this item; the results of this inspection will be documented in NRC Inspection Report 05000361/2011003 and 05000362/2011003. |
| Licensee Action | | Describe the licensee's actions and conclusions regarding training and qualifications of operators and support staff. |
| c. Verify the training and qualifications of operators and the support staff needed to implement the procedures | | Licensee personnel reviewed the training and qualifications required by their program for operators and support staff involved in implementing strategies associated with B.5.b and severe accident management guidelines. Training and qualification records were reviewed to determine if required training was completed and current. |

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| and work instructions are current for activities related to Security Order Section B.5.b and severe accident management guidelines as required by 10 CFR 50.54(hh). | | Describe inspector actions and the sample strategies reviewed to assess training and qualifications of operators and support staff. |
| | | The inspectors reviewed training records for operators and support staff. The inspectors walked down and discussed several strategies with plant operators and fire department personnel to ensure that they knew where the equipment was located, how to operate the equipment, and could complete the procedures as written. The ease of use of the equipment was also assessed. |
| | | Discuss general results including corrective actions by licensee. |
| | | Deficiencies in training and qualifications were identified for operators and support staff. Specifically, one licensed operator had not received initial training on B.5.b strategies, the maintenance general foremen had only received a walkthrough of B.5.b strategies during initial B.5.b implementation with no formal qualifications, and approximately five percent of the individuals in the emergency response organization had not received training on B.5.b strategies. Other deficiencies identified were associated with a lack of continuing training requirements for severe accident management guidelines strategies for operators and support staff and a lack of continuing training requirements for B.5.b strategies for support staff. These deficiencies were entered into the corrective action program. Immediate actions were taken to train and qualify personnel as required. The inspectors plan to conduct further inspections on this item; the results of this inspection will be documented in NRC Inspection Report 05000361/2011003 and 05000362/2011003. |
| Licensee Action | | Describe the licensee's actions and conclusions regarding applicable agreements and contracts are in place. |
| d. Verify that any applicable agreements and contracts are in place and are capable | | The licensee verified the emergency plan agreements, fire protection agreements, nuclear steam supply system vendor and INPO emergency support agreements, and the fuel contract for the emergency diesel generators were in place and current. |

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| of meeting the conditions needed to mitigate the consequences of these events.<br><br>This review should be done for a reasonable sample of mitigating strategies/equipment. | | For a sample of mitigating strategies involving contracts or agreements with offsite entities, describe inspector actions to confirm agreements and contracts are in place and current (e.g., confirm that offsite fire assistance agreement is in place and current). |
| | | The inspectors reviewed copies of the agreements and contracts that the licensee had in place and verified that they were current. For a sample of mitigating strategies, the inspectors verified that agreements and contracts would provide the resources necessary to assist in mitigating the consequences of the events.<br><br>The inspectors requested the fuel contract for the emergency diesel generators for review. The licensee did not have a current contract in place, but had processes to procure contracts and obtain fuel oil on an as-needed basis. |
| | | Discuss general results including corrective actions by licensee. |
| | | The deficiency associated with the lack of a written agreement for fuel oil supply to support emergency diesel generators when operation was required for more than seven days was entered into the corrective action program. An improvement opportunity was also identified by the licensee associated with placing emergency response resource manuals at each of the emergency response facilities for reference and entered the item into the corrective action program. |

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| Licensee Action | | Document the corrective action report number and briefly summarize problems noted by the licensee that have significant potential to prevent the success of any existing mitigating strategy. |
| e. Review any open corrective action documents to assess problems with mitigating strategy implementation identified by the licensee. Assess the impact of the problem on the mitigating capability and the remaining capability that is not impacted. | | The licensee is capturing all items associated with the Fukushima event in Nuclear Notification NN 201373720. The licensee identified more than 45 deficiencies and improvement opportunities that were entered into the corrective action program. None of the identified deficiencies would be expected to impact the success of any severe accident action. |

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| **03.02 Assess the licensee's capability to mitigate station blackout conditions, as required by 10 CFR 50.63, "Loss of All Alternating Current Power," and station design, is functional and valid. Refer to Temporary Instruction 2515/120, "Inspection of Implementation of Station Blackout Rule Multi-Plant Action Item A-22" as a guideline. It is not intended that Temporary Instruction 2515/120 be completely re-inspected. The inspection should include, but not be limited to, an assessment of any licensee actions to:** | | |
| Licensee Action | | Describe the licensee's actions to verify the adequacy of equipment needed to mitigate a station blackout event. |

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| a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained. | | The licensee reviewed the Updated Final Safety Analysis Report, the SONGS Design Bases Document Topical Report, the Station Blackout Analysis Report, and the station blackout procedure to verify the designated equipment required and associated actions performed during a station blackout event. The licensee walked down all station blackout specified equipment using existing surveillance or implementation procedures. All permanent plant equipment for station blackout was verified to be available and functional. The licensee also tested the credited seismically stored portable generator and fuel supply for each unit and both generators successfully completed the test. In addition, the licensee verified the equipment used in association with the portable generators were present where required. |
| | | Describe inspector actions to verify equipment is available and useable. |
| | | The inspectors reviewed the licensee's Updated Final Safety Analysis Report and station blackout procedure to understand the licensee's required equipment and associated actions. The inspectors conducted independent walkdowns and observed tests performed by the licensee of important equipment needed to mitigate a station blackout event to verify the equipment was available and able to perform its required function. The inspectors observed the licensee test one of the portable generators and reviewed the subsequent test documentation. In addition, the inspectors walked down the Unit 3 turbine-driven auxiliary feedwater pump to look for deficiencies or system misalignments that could affect the operability of the system. The inspectors also observed the operation of the Unit 3 turbine-driven auxiliary feedwater pump in an unrelated surveillance test to ensure the pump operated as designed. The inspectors questioned the licensee on the actions taken to verify the materials associated with the use of the portable generator were adequate. Specifically, if the extension cords used to connect power from the portable generator to plant equipment were re-verified to be of an adequate length. |
| | | Discuss general results including corrective actions by licensee. |

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| | | No operability concerns were identified by the inspectors during the walkdowns and test observations of the portable generators and the turbine-driven auxiliary feedwater pump. As a result of the inspectors' questions regarding the re-verification of the portable generator extension cords' length, the licensee entered this observation into the corrective action program and re-verified the length of the cords was adequate. |
| Licensee Action | | Describe the licensee's actions to verify the capability to mitigate a station blackout event. |
| b. Demonstrate through walkdowns that procedures for response to a station blackout are executable. | | The licensee verified the station blackout procedures to be current with no pending critical revisions. The licensee identified the corrective action program was tracking a new revision to provide clarification and betterment for one station blackout procedure. The licensee also walked down the station blackout procedures to verify the steps to be executable. |
| | | Describe inspector actions to assess whether procedures were in place and could be used as intended. |
| | | The inspectors reviewed the station blackout procedures to understand the licensee's actions during a station blackout event. The inspectors performed interviews and conducted walkdowns, both independent and with licensee personnel, in regards to the required actions described in the station blackout procedures. The inspectors verified the actions described pertaining to the turbine-driven auxiliary feedwater pump, portable generator, and time-dependent station blackout actions required by their licensing basis could be performed. |
| | | Discuss general results including corrective actions by licensee. |

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| | | In general, no significant concerns were identified with regards to the licensee's ability to perform the actions described in the station blackout procedures. The inspectors verified the actions walked down and discussed with the licensee were executable. As a result of the inspectors' questions regarding portable generator cord length adequacy, the licensee demonstrated the station blackout procedures were executable. This was performed by measuring the extension cords and the distances needed to connect the required equipment to the generator and then verifying the cords had adequate length. |

| **03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design. Refer to Inspection Procedure 71111.01, "Adverse Weather Protection," Section 02.04, "Evaluate Readiness to Cope with External Flooding" as a guideline. The inspection should include, but not be limited to, an assessment of any licensee actions to verify through walkdowns and inspections that all required materials and equipment are adequate and properly staged. These walkdowns and inspections shall include verification that accessible doors, barriers, and penetration seals are functional.** | | |
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| Licensee Action | | Describe the licensee's actions to verify the capability to mitigate existing design basis flooding events. |
| a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained. | | The licensee reviewed their design and licensing basis, including the Updated Final Safety Analysis Report and supporting calculations, to identify the internal and external flooding elevations, structures, barriers, and relief pathways. In addition, the licensee reviewed their flood response procedures to identify room flood detectors, flood relief pathways, sumps, and non-permanent plant equipment credited for mitigation of internal and external floods. The licensee identified through this review that no non-permanent plant equipment is credited for mitigation. The licensee verified that the room flood detectors were operable and inspected them in the field where accessible to verify the material condition was acceptable. The licensee also performed three separate walkdown efforts: |

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| | | 1) External flood protection features credited for protection against an external flood event or tsunami;<br>2) Flood protection features of rooms and areas credited to contain or convey flood water to ensure the features were acceptable; and<br>3) Flood drainage pathways to verify there were no obstructions<br>Each walkdown effort included the applicable flooding structures and accessible barriers. |
| | | Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended. |
| | | The inspectors reviewed the Updated Final Safety Analysis Report to determine what the licensee's credited external and internal flood protection features are and where they are located. The inspectors also reviewed the severe weather response procedure to verify the licensee did not credit any non-permanent plant equipment for flood mitigation. The inspectors questioned the licensee on temporary equipment currently installed in the turbine-driven auxiliary feedwater pump pipe trench to determine if it is credited for flood mitigation. The inspectors performed independent walkdowns of selected rooms and areas containing flood mitigation protective features to verify the accessible protective features were functional. Specifically, the inspectors walked down the accessible Units 2 and 3 fuel handling building rooms, Units 2 and 3 primary plant makeup water storage tank rooms, selected levels of the auxiliary radwaste building, selected rooms of the Units 2 and 3 safety equipment building, Units 2 and 3 storage tank building and auxiliary feedwater pump rooms, and selected areas of the Units 2 and 3 cable tunnels. |
| | | Discuss general results including corrective actions by licensee. |

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| | | For the most part, the credited flood protection measures that were walked down by the inspectors were functional and consistent with what is described in the Updated Final Safety Analysis Report. The licensee identified and documented that several Unit 3 electric cable tunnel manholes had damaged seals. An additional issue was identified by the inspectors concerning the water tightness of the manholes. Particularly, the 4-1/2 inch diameter inspection covers on Manholes MH319 and MH322 were not positively sealed or controlled to prevent uncontrolled water intrusion into the Unit 3 electric cable tunnels during the maximum design basis flood event. The licensee has entered this issue into the corrective action program. The inspectors plan to conduct further inspection of flood protection measures; the results of this inspection will be documented in NRC Inspection Report 05000361/2011003 and 05000362/2011003. |

**03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. Assess the licensee's development of any new mitigating strategies for identified vulnerabilities (e.g., entered it in to the corrective action program and any immediate actions taken). As a minimum, the licensee should have performed walkdowns and inspections of important equipment (permanent and temporary) such as storage tanks, plant water intake structures, and fire and flood response equipment; and developed mitigating strategies to cope with the loss of that important function. Use Inspection Procedure 71111.21, "Component Design Basis Inspection," Appendix 3, "Component Walkdown Considerations," as a guideline to assess the thoroughness of the licensee's walkdowns and inspections.**

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| Licensee Action | | Describe the licensee's actions to assess the potential impact of seismic events on the availability of equipment used in fire and flooding mitigation strategies. |
| a. Verify through walkdowns that all required materials are adequate and properly staged, tested, and maintained. | | Post-seismic fire and post-seismic flooding are both part of the design and licensing basis at SONGS.<br>The following fire protection features were verified available:<br>• Water suppression system<br>• Fire hoses |

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| | | • Hose stations<br>• Fire detection system<br>• Fire barriers<br><br>Flood protection features were verified available by the licensee as described in Section 03.04. |
| | | Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended. |
| | | The inspectors performed walkdowns of portions of the seismic water suppression system and flood protection features to confirm that the structures, systems, and components were in their designed configuration to perform the required function following a seismic event. The inspectors independently walked down the licensee's equipment to ensure it was available and usable and to ensure that the procedures could be accomplished as written. These walkdowns included watertight doors, the walls of all external buildings for signs of degradation, the seismically qualified portions of the fire protection system, fire hoses stored onsite, and the seismically dedicated diesel fire pump. |
| | | Discuss general results including corrective actions by licensee. Briefly summarize any new mitigating strategies identified by the licensee as a result of their reviews. |
| | | Units 2 and 3 have a common seismic water suppression system that is isolable from the non-seismic supply system. Consequently, the design of the non-seismic supply system is not a vulnerability at SONGS. Hoses to connect from the seismically qualified pump to the plant seismic suppression system are located on two fire trucks and various locations onsite. The licensee identified storage locations for some firefighting equipment may be impacted by a seismic event that could challenge the equipment's availability. These deficiencies were entered into the corrective action program. |

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| | | Flood protection features are seismically qualified, and consequently, the design of flood protection features is not a vulnerability at SONGS. |

## EXIT MEETING SUMMARY

The inspectors presented the inspection results to Mr. D. Yarbrough, Director, Plant Operations, and other members of licensee management at the conclusion of the inspection on May 3, 2011. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

## SUPPLEMENTAL INFORMATION

## KEY POINTS OF CONTACT

Licensee

J. Armas, Supervisor, Maintenance Engineering, Fluid Process
D. Axline, Project Manager, Nuclear Regulatory Affairs
D. Bauder, Vice President, Station Manager
J. Dahl, Manager, Plant Operations
J. Davis, Manager, Plant Operations
D. Ensmenger, Manager, Fire Protection Services
K. Gallion, Manager, Onsite Emergency Preparedness
G. Kline, Director, Engineering and Technical Services
R. MacKenzie, Supervisor, Fire Protection Services
C. McAndrews, Director, License Renewal
M. McBrearty, Project Manager, Nuclear Regulatory Affairs
T. McCool, Plant Manager
J. McGaw, Manager, Plant Engineering
S. Root, Manager-Project, Nuclear Regulatory Affairs
C. Ryan, Manager, Maintenance
M. Stevens, Engineer, Regulatory Affairs
R. St. Onge, Director, Nuclear Regulatory Affairs
B. Yale, Senior Nuclear Engineer, Design Engineering
D. Yarbrough, Director, Plant Operations

Nuclear Regulatory Commission

G. Replogle, Senior Reactor Analyst

## LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

**03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events**

PROCEDURES

| NUMBER | TITLE | REVISION |
|---|---|---|
| SOG-E0-0001 | Firewater to Plant Systems – Spent Fuel Pool Make-up | 11 |
| SO123-XIII-54 | Fire Equipment Inspection | 23 |
| SOG-E0-0002 | Firewater to Plant Systems – Steam Generator Make-up | 12 |
| SO23-V-5.100, Attachment 10 | Manually Depressurize Steam Generators (SGx) and Fill with a Portable Pump | 2 |
| SO23-V-5.100, Attachment 13 | Manually Opening Main Feedwater Isolation Valves (MFIVs) | 2 |
| SO23-V-5.100, Attachment 1 | Command And Control Strategy | 2 |
| SO23-XIII-73 | Annual Pump Flow Test | 2 |
| SO123-XIII-54, Attachment 6 | Fire Protection Procedure | 23 |
| SO23-V-5.100 | SONGS B.5.b Mitigation Strategies | 2 |
| SO123-VIII-0.201 | Emergency Plan Equipment Surveillance Program (EPESP) | 20 |

NUCLEAR NOTIFICATIONS

| | | | | |
|---|---|---|---|---|
| 050300167 | 201230609 | 201263476 | 201342464 | 201373238 |
| 201373720 | 201382897 | 201386078 | 201386078 | 201386373 |
| 201387001 | 201387045 | 201387049 | 201387050 | 201387116 |
| 201387116 | 201387118 | 201387119 | 201387146 | 201387163 |
| 201387194 | 201387198 | 201387199 | 201387200 | 201387201 |
| 201387202 | 201387254 | 201388330 | 201388498 | 201388771 |
| 201408473 | 201417331 | 201429341 | 201430861 | 201431189 |
| 201432333 | 201444814 | 201446370 | | |

WORK ORDERS

| | | | | |
|---|---|---|---|---|
| 800320100 | 800587811 | 800603106 | 800603125 | 800617591 |
| 800643846 | | | | |

DRAWINGS

| NUMBER | TITLE | REVISION |
|---|---|---|
| 2/3-027 | Pre-Fire Plans Unit 2/3 Auxiliary Radwaste | 6 |
| 2/3-029 | Pre-Fire Plans Unit 2/3 Auxiliary Radwaste | 5 |
| 2-005 | Pre-Fire Plans Unit 2 Penetration & Fuel Handling | 7 |
| 3-037 | Pre-Fire Plans Unit 3 Penetration & Fuel Handling | 6 |

**03.02 Assess the licensee's capability to mitigate station blackout conditions**

PROCEDURES

| NUMBER | TITLE | REVISION |
|---|---|---|
| SO23-12-11 | EOI Supporting Attachments | 9 |
| SO23-12-8 | Station Blackout | 22 |
| SO23-V-5.100, Attachment 9 | Manual Operation of Turbine Driven Auxiliary Feedwater (AFW) Pump | 2 |

NUCLEAR NOTIFICATIONS

| | | | |
|---|---|---|---|
| 201376526 | 201377163 | 201390748 | 201427373 |
| 201440936 | 201440936 | | |

**03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design**

PROCEDURES

| NUMBER | TITLE | REVISION |
|---|---|---|
| SO23-13-8 | Severe Weather | 10 |

NUCLEAR NOTIFICATIONS

| | | | | |
|---|---|---|---|---|
| 201040837 | 201184134 | 201200176 | 201373645 | 201381059 |
| 201382742 | 201387017 | 201391154 | 201391245 | 201391246 |
| 201392012 | 201392157 | 201392178 | 201393463 | 201397584 |
| 201398675 | 201399555 | 201400824 | 201400829 | 201400829 |
| 201402375 | 201402424 | 201405257 | 201405257 | 201406042 |
| 201406204 | 201408421 | 201408433 | 201408438 | 201408441 |
| 201409949 | 201417042 | 201418373 | 201421657 | 201421713 |

DRAWINGS

| NUMBER | TITLE | REVISION |
|---|---|---|
| 2/3-031 | Pre-Fire Plans, Unit 2 Auxiliary Radwaste, El. 24’ | 4 |
| 2/3-032 | Pre-Fire Plans, Unit 2 Auxiliary Radwaste, El. 9’ | 6 |
| 2-002 | Pre-Fire Plans, Unit 2 Penetration and Fuel Handling Buildings, El. -18’3” to 23’6” | 4 |
| 2-003 | Pre-Fire Plans, Unit 2 Penetration and Fuel Handling Buildings, El. 30’ | 4 |
| 2-004 | Pre-Fire Plans, Unit 2 Penetration and Fuel Handling Buildings, El. 45’ | 5 |
| 2-005 | Pre-Fire Plans, Unit 2 Penetration and Fuel Handling Buildings, El. 63’-6” | 7 |
| 2-006 | Pre-Fire Plans, Unit 2 Safety Equipment, El. -15’6” to 8’ | 6 |
| 2-007 | Pre-Fire Plans, Unit 2 Safety Equipment, El. -15’-6” | 5 |
| 3-034 | Pre-Fire Plans, Unit 2 Penetration and Fuel Handling Buildings, El. -18’3” to 23’6” | 4 |
| 40002 | Unit 2 Plan at EL 45’-0” to 30’-0” | 36 |
| 40004 | Units 2 and 3 General Arrangement Sections A,D,G | 6 |
| 40005 | Units 2 and 3 General Arrangement Section B, C | 8 |
| 40009 | Unit 3 Plan at EL 45’-0” to 30’-0” | 20 |

**03.04 Assess the thoroughness of the licensee’s walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment’s function could be lost during seismic events**

NUCLEAR NOTIFICATIONS

| | | | | |
|---|---|---|---|---|
| 201363473 | 201409984 | 201412147 | 201412255 | 201416655 |
| 201416886 | 201416948 | 201417035 | 201417040 | 201417042 |
| 201417307 | 201419012 | 201419420 | 201419477 | 201419489 |
| 201419490 | 201419544 | 201421619 | 201421737 | 201423142 |
| 201423287 | 201427468 | | | |