



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 15, 2010

Mr. James J. Sheppard
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, UNITS 2 AND 3 -
ISSUANCE OF AMENDMENTS REVISING TECHNICAL SPECIFICATION 3.8.1,
"AC SOURCES - OPERATING" (TAC NOS. ME4508 AND ME4509)

Dear Mr. Sheppard:

The Commission has issued the enclosed Amendment No. 224 to Facility Operating License No. NPF-10 and Amendment No. 217 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station (SONGS), Units 2 and 3, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 16, 2010.

The amendments revise TS 3.8.1, "AC [Alternating Current] Sources - Operating," Condition A, to allow a one-time extension per train to the Completion Time to restore an inoperable required offsite circuit. The one-time extension, from 72 hours to 10 days, will allow the performance of preventative maintenance on all of the 4160-volt breaker cubicles on one train at the same time.

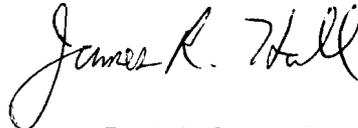
The Nuclear Regulatory Commission staff has approved the proposed changes, subject to the restrictions incorporated into TS 3.8.1, and the commitments made in your August 16, 2010, application. The related safety evaluation, which describes the final no significant hazards

J. Sheppard

- 2 -

determination is enclosed. A Notice of Issuance addressing the final no significant hazards determination will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink that reads "James R. Hall". The signature is written in a cursive style with a large, looping initial "J".

James R. Hall, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures:

1. Amendment No. 224 to NPF-10
2. Amendment No. 217 to NPF-15
3. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

DOCKET NO. 50-361

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 224
License No. NPF-10

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, et al. (SCE or the licensee), dated August 16, 2010, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

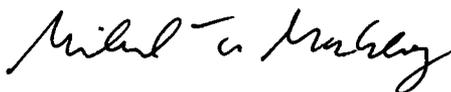
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C(2) of Facility Operating License No. NPF-10 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 224, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility
Operating License No. NPF-10
and Technical Specifications

Date of Issuance: October 15, 2010



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

DOCKET NO. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 217
License No. NPF-15

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Southern California Edison Company, et al. (SCE or the licensee), dated August 16, 2010, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C(2) of Facility Operating License No. NPF-15 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 217, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility
Operating License No. NPF-15
and Technical Specifications

Date of Issuance: October 15, 2010

ATTACHMENT TO LICENSE AMENDMENT NO. 224

FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Replace the following pages of the Facility Operating License No. NPF-10 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

REMOVE

3

INSERT

3

Technical Specifications

REMOVE

3.8-1

INSERT

3.8-1

- (3) SCE, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
 - (4) SCE, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (5) SCE, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (6) SCE, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of San Onofre Nuclear Generating Station, Units 1 and 2 and by the decommissioning of San Onofre Nuclear Generating Station Unit 1.
- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
Southern California Edison Company (SCE) is authorized to operate the facility at reactor core power levels not in excess of full power (3438 megawatts thermal).
 - (2) Technical Specifications
The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 224, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3.8 ELECTRICAL POWER SYSTEMS

3.8.1 AC Sources – Operating

- LCO 3.8.1 The following AC electrical sources shall be OPERABLE:
- a. Two qualified circuits between the offsite transmission network and the onsite Class 1E AC Electrical Power Distribution System; and
 - b. Two diesel generators (DGs) each capable of supplying one train of the onsite Class 1E AC Electrical Power Distribution System.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One required offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit.	1 hour <u>AND</u> Once per 8 hours thereafter
	<u>AND</u> A.2 Restore required offsite circuit to OPERABLE status.	-----NOTE----- The Completion Time may be extended to 10 days once per train prior to 7/01/2012 to perform maintenance. ----- 72 hours <u>AND</u> 17 days from discovery of failure to meet LCO

(continued)

ATTACHMENT TO LICENSE AMENDMENT NO. 217

FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Replace the following pages of the Facility Operating License No. NPF-15 and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License

REMOVE

3

INSERT

3

Technical Specifications

REMOVE

3.8-1

INSERT

3.8-1

- (3) SCE, pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (4) SCE, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear materials as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (5) SCE, pursuant to the Act and 10 CFR Parts 30, 40, and 70 to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
- (6) SCE, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of San Onofre Nuclear Generating Station, Units 1 and 3 and by the decommissioning of San Onofre Nuclear Generating Station Unit 1.

C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Southern California Edison Company (SCE) is authorized to operate the facility at reactor core power levels not in excess of full power (3438 megawatts thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 217, are hereby incorporated in the license. Southern California Edison Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3.8 ELECTRICAL POWER SYSTEMS

3.8.1 AC Sources – Operating

- LCO 3.8.1 The following AC electrical sources shall be OPERABLE:
- a. Two qualified circuits between the offsite transmission network and the onsite Class 1E AC Electrical Power Distribution System; and
 - b. Two diesel generators (DGs) each capable of supplying one train of the onsite Class 1E AC Electrical Power Distribution System.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One required offsite circuit inoperable.</p>	<p>A.1 Perform SR 3.8.1.1 for required OPERABLE offsite circuit.</p> <p><u>AND</u></p> <p>A.2 Restore required offsite circuit to OPERABLE status.</p>	<p>1 hour</p> <p><u>AND</u></p> <p>Once per 8 hours thereafter</p> <p>-----NOTE----- The Completion Time may be extended to 10 days once per train prior to 7/01/2012 to perform maintenance. -----</p> <p>72 hours</p> <p><u>AND</u></p> <p>17 days from discovery of failure to meet LCO</p>

(continued)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 224 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 217 TO FACILITY OPERATING LICENSE NO. NPF-15
SOUTHERN CALIFORNIA EDISON COMPANY
SAN DIEGO GAS AND ELECTRIC COMPANY
THE CITY OF RIVERSIDE, CALIFORNIA
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3
DOCKET NOS. 50-361 AND 50-362

1.0 INTRODUCTION

By letter dated August 16, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102290073), Southern California Edison Company (SCE, or the licensee), submitted a license amendment request (LAR) for changes to the Technical Specifications (TS) for the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. The proposed TS changes would allow, on a one-time basis, extension of the Completion Time (CT) for TS Limiting Condition for Operation (LCO) 3.8.1, Required Action A.2, to perform preventive maintenance on 4.16 kilovolt (kV) Class 1E breaker cubicles on both units. The proposed amendment requests an extension of the completion time to 10 days, once-per-train for each unit, to expire on June 30, 2012.

The purpose of the proposed changes is to allow preventive maintenance and replacement of cracked bottle flanges in Class 1E breaker cubicles during the next refueling outage for each unit. Specifically, the CT to restore operability of the required alternating current (AC) source (an offsite circuit) would be extended from 3 days to 10 days, once per train. This would allow sufficient time for the licensee to complete the Class 1E breaker bottle flange replacement, testing, inspection, review, and return to service of all 4.16 kV breakers on one train.

2.0 REGULATORY EVALUATION

The U.S. Nuclear Regulatory Commission (NRC) staff considered the following regulatory requirements and guidance in its review of the licensee's application.

The Commission's regulatory requirements related to the content of the TS are set forth in Section 50.36, "Technical specifications," of Title 10 of the *Code of Federal Regulations*

(10 CFR). Specifically, 10 CFR 50.36(c)(2)(ii)(B) requires that limiting conditions for operation (LCOs) be established for a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. The NRC staff evaluated the proposed change to the current LCO for the AC electrical power systems in accordance with the 50.36(c)(2)(ii)(B) requirements.

The regulations in 10 CFR Part 50, Appendix A, General Design Criterion (GDC) 17, "Electric power systems," require, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of structures, systems, and components (SSCs) that are important to safety. The onsite system is required to have sufficient independence, redundancy, and testability to perform its safety function, assuming a single failure. The offsite power system is required to be supplied by two physically independent circuits that are designed and located so as to minimize, to the extent practical, the likelihood of their simultaneous failure under operating and postulated accident and environmental conditions. In addition, this criterion requires provisions to minimize the probability of losing electric power from the remaining electric power supplies as a result of loss of power from the unit, the offsite transmission network, or the onsite power supplies.

The regulations in 10 CFR Part 50, Appendix A, GDC 18, "Inspection and testing of electric power systems," require, in part, that electric power systems that are important to safety must be designed to permit appropriate periodic inspection and testing of important areas and features.

The regulations in 10 CFR 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants," require, in part, that each licensee monitor the performance or condition of SSCs, against licensee-established goals, in a manner sufficient to provide reasonable assurance that these SSCs are capable of fulfilling their intended functions. Additionally, performance and condition monitoring activities and associated goals and preventive maintenance activities shall be evaluated at least every refueling cycle provided the interval between evaluations does not exceed 24 months. The evaluations shall take into account, where practical, industry-wide operating experience. Adjustments shall be made where necessary to ensure that the objective of preventing failures of SSCs through maintenance is appropriately balanced against the objective of minimizing unavailability of SSCs due to monitoring or preventive maintenance.

NRC Regulatory Guide (RG) 1.93, "Availability of Electric Power Sources," date December 1974 (ADAMS Accession No. ML003740292), provides guidance with respect to operating restrictions (i.e., CTs/allowed outage times) if the number of available AC sources is less than that required by the TS LCO.

3.0 TECHNICAL EVALUATION

3.1 Design Considerations:

The TS 3.8.1, Required Action A.2 change is requested to allow, on a one-time basis, maintenance to be performed on the 4.16 kV Class 1E breaker cubicles on each unit during that unit's next refueling outage. The licensee has identified a number of breaker bottle (bushings)

with cracks. In its application dated August 16, 2010, the licensee has proposed to extend the CT for restoration of an inoperable offsite circuit from 72 hours to 10 days on a one-time basis by adding a Note to TS LCO 3.8.1, Condition A, Required Action A.2 CT which states,

The Completion Time may be extended to 10 days once per train prior to 7/01/2012 to perform maintenance.

The requested one-time per train CT of 10 days will allow for the replacement of all bottles in the 4.16 kV Class 1E breaker cubicles in a single train with one entry into TS LCO 3.8.1 Condition A, Required Action A.2. This maintenance will be performed while one unit is in a refueling outage and the other is operating.

The licensee stated that the planned maintenance activities are for a total of 27 breakers to be worked on Unit 3 buses 3A04 and 3A06 during the Cycle 16 refueling outage, commencing in October 2010. The licensee replaced 4 bottles in the Unit 2, Train B, bus 2A06 breakers during the previous Unit 2 Cycle 16 refueling outage. The balance of the Unit 2 breaker bottles on buses 2A04 and 2A06 will be replaced during the Unit 2 Cycle 17 refueling outage, currently scheduled to begin in October 2011.

The SONGS onsite Class 1E power distribution system is divided into two separate and redundant load groups for each unit, Trains A and B. Loss of any one train on either unit does not prevent the minimum safety functions from being performed. Each load group bus is connected to two offsite power sources (normal and alternate preferred) and one standby emergency diesel generator (EDG). In the normal alignment, the 4.16 kV Class 1E buses on each unit are supplied from the offsite source through that unit's reserve auxiliary transformers.

In the event of a failure of the normal offsite source, AC power to the Class 1E loads of one unit will transfer to the alternate preferred source via the other unit using the cross-tie circuit breakers. An automatic transfer will occur if the alternate source is available. In the event of loss of normal and alternate preferred offsite power sources, the safety-related loads will be supplied by the EDG dedicated to each shutdown bus.

Following a unit shutdown, a third source of offsite power can be manually connected by disconnecting the main generator and back feeding through the main transformer and unit auxiliary transformer of the non-operating unit.

3.2 NRC Staff Evaluation of Proposed Change

The NRC staff evaluated the design of offsite and Class 1E onsite circuits described in the LAR, and the current plant configuration of the circuits provided in the single line diagrams attached to the LAR.

TS 3.8.1, "A.C. Sources – Operating," requires two sources of offsite power per bus when the unit is operating in MODES 1 through 4. In order to replace the breaker bottles, the 4.16 kV switchgear must be de-energized. When a 4.16 kV bus is de-energized in a shutdown unit, the corresponding bus on the operating unit loses the fast transfer capability to the alternate preferred source of offsite power, requiring entry into TS LCO 3.8.1, Condition A, with a CT of 72 hours. In order to minimize the overall downtime of the safety-related switchgear, the

licensee plans to replace the bottles for all breakers on a specific safety bus during a single LCO entry during the refueling outage for each unit. The licensee has stated that the proposed bottle replacement and required maintenance activities can be completed in 10 days per bus, and has, therefore, requested a CT of 10 days, to be applied only one time per train, instead of the normal 72 hours allowed for TS LCO 3.8.1, Condition A. The proposed change will preclude multiple entries into TS LCO 3.8.1 and minimize the potential for human performance related errors for this specific breaker bottle replacement activity.

TS 3.8.9, "Distribution Systems - Operating," requires that in MODES 1 through 4 there are two OPERABLE electrical distribution systems. This TS is not affected for the operating unit during the breaker maintenance activities on the shutdown unit.

TS 3.8.2, "AC Sources - Shutdown," requires that in MODES 5 and 6 there is one operable qualified circuit between the offsite transmission network and the onsite electrical distribution system. TS 3.8.10, "Distribution Systems - Shutdown," requires that in MODES 5 and 6 there is one operable electrical power distribution system. These TSs will be applicable for the shutdown unit and are not affected by the proposed change.

The NRC staff evaluated the plant configuration during the planned maintenance of the Class 1E breakers. As an example, when Unit 3 is in a refueling outage, the removal from service of 4.16 kV bus 3A04 affects the alternate preferred power source to the corresponding 4.16 kV bus, 2A04 of the operating Unit 2. In this case, the redundant bus 2A06 of the operating Unit 2 will have two preferred power sources (normal and alternate) and the standby EDG, but the affected bus 2A04 will have only one preferred offsite power source (normal) and the dedicated EDG. In this configuration, without the alternate preferred offsite power source to one of the two redundant buses, the licensee has stated that each bus on Unit 2 is capable of mitigating and safely shutting down the plant for all design-basis accidents using the normal offsite power source. In the event of loss of all the offsite power sources or loss of normal preferred power source (degraded or loss of voltage) concurrent with a safety injection signal, the Class 1E AC buses of the operating unit will be powered from the redundant EDGs, which are the standby power sources.

In the remote event of a station blackout at one unit, the licensee has evaluated the loading requirements for the available EDG on the other unit. This evaluation considered the two units in different operating modes and requires manual loading of the available EDG. The licensee has concluded that a single EDG is capable of supplying the minimum load necessary to bring both units into a safe shutdown condition without exceeding the EDG normal load limit of 4,700 kilowatts (kW), continuous, or 5,170 kW maximum for 2 hours in a 24-hour period.

The licensee plans to replace steam generators on Unit 3 during the fall 2010 refueling outage and has indicated that the main transformer of Unit 3 will be de-energized and tagged out and will not be available to use as a back feed source via the unit's auxiliary transformer. Since this third source of offsite power is normally not available for immediate accident mitigation actions under normal conditions, its availability is not assumed during the specified breaker maintenance activities.

In a letter dated April 3, 2006 (ADAMS Accession No. ML061020082), in response to NRC Generic Letter 2006-02, "Grid Reliability and the Impact on Plant Risk and the Operability of

Offsite Power," dated February 1, 2006 (ADAMS Accession No. ML060180352), the licensee provided details of the protocol with grid operators and plant procedures implemented for offsite power reliability. Compliance with these established procedures will minimize the risk of loss of offsite power and ensure that risk-significant activities are not conducted during potentially degraded grid conditions.

The NRC staff has reviewed the licensee's analysis and regulatory commitments in the LAR and agrees with the licensee's conclusion that the proposed amendment to TS 3.8.1 to extend the CT to 10 days, once per train, per unit, prior to July 1, 2012, is acceptable. The proposed amendment will result in reduced availability of the alternate preferred power source to one redundant 4.16 kV Class 1E load group on an operating unit, for up to an additional 7 days beyond the current TS CT of 3 days. However, the extended CT may only be applied one time, for each train, for each unit, for the purpose of performing maintenance on the 4.16 kV breaker bottles; therefore, this reduced availability will be strictly limited. An additional limitation in the extended CT further restricts its use to the period prior to July 1, 2012, to ensure timely completion of the breaker maintenance. The redundant (second) 4.16 kV Class 1E load group bus of the operating unit will have both preferred power sources available, maintaining the defense-in-depth design features to provide high assurance that the load group will perform its safety function. In the remote event of loss of all the offsite power sources or loss of the normal preferred power source for the operating unit train corresponding to the train undergoing breaker maintenance on the shutdown unit, the Class 1E AC buses will be powered from the redundant EDGs. In addition, the compensatory measures committed to by the licensee in Section 4.0 of this safety evaluation will protect safety significant equipment and reduce plant risk during repair and maintenance activities on the 4.16 kV breakers.

The NRC staff concludes that there is reasonable assurance that the equipment required to safely shut down the operating unit and mitigate the effects of a design-basis accident will remain capable of performing its safety function during the specified maintenance activities when the alternate preferred power source circuit is not available to one of the two redundant 4.16 kV Class 1E buses of the operating unit. When the alternate preferred power source circuit is not available to one train, normal preferred offsite power will be available to that train, the redundant operating unit buses will still have two independent offsite power sources available, and the EDGs will also be available, if needed. Therefore, the intent of 10 CFR 50, Appendix A, GDC 17 and GDC 18 will be met. The staff further concludes that the proposed amendment and planned maintenance activities are also consistent with the requirements of 10 CFR 50.36 and 10 CFR 50.65.

A list of regulatory commitments submitted by licensee is included in Section 4.0 of this safety evaluation. The licensee is expected to implement these commitments in a timely manner as described. Changes to the plans for implementation should be communicated to the NRC staff in accordance with the guidance provided in Nuclear Energy Institute (NEI) 99-04, "Guidelines for Managing NRC Commitment Changes."

4.0 REGULATORY COMMITMENTS

The licensee has planned several compensatory measures to minimize plant risk during the 10-day CT when the alternate offsite circuit would be unavailable to one train of the operating

unit. The licensee identified the following actions as regulatory commitments in its application dated August 16, 2010.

Online Unit (MODES 1 to 4) Compensatory Measures:

- Protect the available offsite source: via switchyard barriers and 4.16 kV cross-tie breaker barriers.
- Protect both onsite sources - Perform Surveillances on the operating unit EDGs prior to entering Action Statement, and protect the available switchgear room.
- Ensure the protected train is the train with the Operable 4.16 kV cross-tie.
- Ensure affected train common equipment (1E 480 VAC [volts alternating current] buses, emergency chillers, control room emergency cooling units) are aligned to the on-line unit.
- Protect all 3 AFW [auxiliary feedwater] pumps.
- Protect switchgear room normal HVAC [heating, ventilation, and air conditioning] cooling unit and exhaust fan.
- Do not allow any switchyard work, or train work on the protected train

Outage Unit Compensatory Measures:

- Protect the available train offsite source: via switchyard barriers and 4.16 kV cross-tie breaker barriers.
- Protect the available train onsite source, EDG and 4.16 kV buses.
- Protect all available train safety function equipment CCW (component cooling water), SWC (saltwater cooling), SDC (shutdown cooling) and SFP (Spent Fuel Pool) cooling.
- Do not allow any work in the switchyard or on the protected electric power buses that are providing safety function fulfillment.
- Scheduling: Work the supply cubicles and cross-tie cubicle bottle replacements first, allowing for a quicker "emergency" return to service.
- Develop a plan to effect an emergency return to service, if required to support the operating unit.
- Bus outages are to be performed during the core offload window, when all fuel is removed from the reactor vessel.

To facilitate the Unit 3 steam generator replacement (SGR), an outside lift system (OLS) and a SGR service crane will be in use at Unit 3. Mitigating actions have been set in place for the OLS and service crane to ensure no movement of load over the switchyard to minimize the risk to the switchyard. As stated in the licensee's letter dated August 16, 2010, the following compensatory measures apply to the Unit 3 Cycle 16 refueling outage only:

- Rigging activities to be limited to one end of the steam generator replacement outside lift system (OLS) to limit potential impact to Unit 3 Train A diesel generator cables located underground near the containment equipment hatch.
- OLS construction, use, and removal to be limited to specific outage windows to reduce risk to the Unit 3 Train A diesel generator cables.
- SONGS NUREG 0612 heavy loads procedural requirements are to be implemented for both the OLS and the service crane to ensure safe load paths are followed, or safe shutdown equipment is taken out of service, during the rigging activity.
- A Unit 3 Cycle 16 shutdown qualitative risk assessment to be performed to provide qualitative risk management actions to demonstrate acceptable outage risk during construction, use, and deconstruction of the OLS.
- Work controls to be in place to lay the service crane boom down prior to severe weather.
- No load movements by the service crane over the switchyard.

The NRC staff considers these to be regulatory commitments and concludes that they are acceptable. These regulatory commitments made by the licensee to the staff are considered as part of the justification for the proposed licensing action. The licensee shall be responsible for creating and maintaining configuration control of the regulatory commitments made to the staff in its commitment management program. Configuration control of regulatory commitments consists of execution of the commitments in a timely fashion as stated, evaluation of changes to the commitments, when appropriate, and reporting of any changes to the NRC.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission may issue the license amendments before the expiration of the 60-day period provided that its final determination is that the amendments involve no significant hazards consideration. These amendments are being issued prior to the expiration of the 60-day period. Therefore, a final finding of no significant hazards consideration follows.

The Commission has made a final determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendments does not (1) involve a significant increase in the probability or consequences of an accident previously

evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented below.

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

This proposed Technical Specification amendment provides a one-time per train extension of the Completion Time of Condition A of Technical Specification 3.8.1, "AC Sources – Operating." Condition A will be revised on a one-time basis to allow a Completion Time of 10 days. This one-time change would be used once on each train on each unit. The revised Completion Time accommodates maintenance which is to be performed on the 4.16 kV [kilo volt] Class 1E breaker cubicles on both units to replace cracked bottle (bushing) flanges. The bottle flange replacement requires extensive work and cannot be completed within the existing 72-hour (3-day) Completion Time.

The consequences associated with extending the Completion Time by 7 days have been evaluated and there is no significant increase in the probability or consequences of an accident previously evaluated.

The minimum requirements of 10 CFR 50 Appendix A, GDC [General Design Criteria] 17 with the alternate preferred power source circuit unavailable to one of the two redundant 4.16 kV Class 1E buses at a time will continue to be met.

Further, the additional time to effect repairs for the bottles will allow for full inspection and replacement of any degraded condition in a timely manner with the minimum impact to safety.

Consequently, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from accident previously evaluated?

Response: No.

The request for this one-time per train Technical Specification change involves an extension of the Completion Time for Technical Specification 3.8.1, Required Action A.2, associated with restoring compliance with the Technical Specification. The proposed change will not physically alter the present plant configuration nor adversely affect how the plant is currently operated. The plant configuration that would result from use of the

revised Completion Time is currently allowed by existing Technical Specifications, only for a shorter duration. This Completion Time change does not create a new or different kind of accident from any kind of accident previously evaluated.

Consequently, there is no possibility of a new or different kind of accident due to this change.

3. Does the proposed change involve significant reduction in a margin of safety?

Response: No.

This proposed Technical Specification amendment provides a one-time per train extension of the Completion Time of Condition A of Technical Specification 3.8.1, "AC Sources – Operating." Condition A will be revised on a one-time basis to allow a Completion Time of 10 days. This one-time change would be used once on each train on each unit. The revised Completion Time accommodates maintenance which is to be performed on the 4.16 kV Class 1E breaker cubicles on both units to replace cracked bottle (bushing) flanges. The bottle flanges replacement requires extensive work and cannot be completed within the existing 72-hour (3-day) Completion Time.

The minimum requirements of 10 CFR 50 Appendix A, GDC 17 with the alternate preferred power source circuit unavailable to one of the two redundant 4.16 kV Class 1E buses at a time continues to be met.

Further, the additional time to effect repairs for the bottles will allow for full inspection and replacement of any degraded condition in a timely manner with the minimum impact to safety.

Consequently, there is no significant reduction in a margin of safety due to this change.

The NRC staff has reviewed the licensee's analysis and based on this review, determined that the three standards of 10 CFR 50.92 are satisfied. Therefore, the NRC staff has determined that the amendments involve no significant hazards consideration.

6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of the amendments. The State official had no comments.

7.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has

determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding published in the *Federal Register* on September 7, 2010 (75 FR 54395). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: S. Som

Date: October 15, 2010

J. Sheppard

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determination is enclosed. A Notice of Issuance addressing the final no significant hazards determination will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/ra/

James R. Hall, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures:

1. Amendment No. 224 to NPF-10
2. Amendment No. 217 to NPF-15
3. Safety Evaluation

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