

September 9, 1999

Mr. Harold B. Ray
Executive Vice President
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 RE: DIESEL GENERATOR TESTING (TAC
NOS. MA0240 AND MA0241)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 158 to Facility Operating License No. NPF-10 and Amendment No. 149 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated June 18, 1997 (PCN-478), as supplemented May 24 and August 10, 1999.

These amendments modify the TS surveillance requirements related to diesel generator testing to more clearly reflect safety analysis and testing conditions as surveillance is performed.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

Original signed by:
L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

9909160034 990909
PDR ADDCK 05000361
P PDR

Docket Nos. 50-361 and 50-362

- Enclosures: 1. Amendment No. 158 to NPF-10
- 2. Amendment No. 149 to NPF-15
- 3. Safety Evaluation

cc w/encls: See next page

DF01/1

DISTRIBUTION:

Docket File (50-361/50-362)

PUBLIC

PDIV-2 r/f

S.Richards (clo)

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J.Kilcrease, RIV

L.Hurley, RIV

L.Smith, RIV

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O.Chopra

OGC

ACRS

CP1

*No major changes to SE

**See previous concurrence

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OFFICE	PDIV-2/PM	C	PDIV-D/LA	C	SC:EELB*	OGC**	PDIV-2/SC
NAME	LRaghavan		CJamerson		DThatcher	RWeisman	SDembek
DATE	9/9/99		9/9/99		06/22/99	9/8/99	9/9/99

DOCUMENT NAME: G:\PDIV-2\SONGS\amd0240.wpd

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OFFICIAL RECORD COPY

Mr. Harold B. Ray
 Executive Vice President
 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 RE: DIESEL GENERATOR TESTING (TAC
 NOS. MA0240 AND MA0241)

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These amendments modify the TS surveillance requirements related to diesel generator testing to more clearly reflect safety analysis and testing conditions as it is performed.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

L. Raghavan, Senior Project Manager, Section 2
 Project Directorate IV & Decommissioning
 Division of Licensing Project Management
 Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. to NPF-10
 2. Amendment No. to NPF-15
 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

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*No major changes to SE

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NAME	LRaghavan		CJamerson		DThatcher	SDembek
DATE	8/18/99		8/17/99		06/22/99	1/ /99

DOCUMENT NAME: G:\PDIV-2\SONGS\amd0240.wpd

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

September 9, 1999

Mr. Harold B. Ray
Executive Vice President
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 RE: DIESEL GENERATOR TESTING (TAC
NOS. MA0240 AND MA0241)

Dear Mr. Ray:

The Commission has issued the enclosed Amendment No. 158 to Facility Operating License No. NPF-10 and Amendment No. 149 to Facility Operating License No. NPF-15 for San Onofre Nuclear Generating Station, Units 2 and 3, respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated June 18, 1997 (PCN-478), as supplemented May 24 and August 10, 1999.

These amendments modify the TS surveillance requirements related to diesel generator testing to more clearly reflect safety analysis and testing conditions as surveillance is performed.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Raghavan", written over a horizontal line.

L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosures: 1. Amendment No. 158 to NPF-10
2. Amendment No. 149 to NPF-15
3. Safety Evaluation

cc w/encls: See next page

San Onofre Nuclear Generating Station, Units 2 and 3

cc:

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San Clemente, CA 92674-0128



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

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-361

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 158
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 June 18, 1997, as supplemented May 24 and August 10, 1999, 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.

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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. 158, 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 30 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 9, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 158

FACILITY OPERATING LICENSE NO. NPF-10

DOCKET NO. 50-361

Replace the following pages of the 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.

REMOVE

INSERT

3.8-5	3.8-5
3.8-7	3.8-7
3.8-8	3.8-8
3.8-9	3.8-9
3.8-10	3.8-10
3.8-11	3.8-11
3.8-12	3.8-12
3.8-14	3.8-14
3.8-15	3.8-15

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.2 -----NOTES-----</p> <ol style="list-style-type: none"> 1. Performance of SR 3.8.1.7 satisfies this SR. 2. All DG starts may be preceded by an engine prelube period and followed by a warmup period prior to loading. 3. A modified DG start involving idling and gradual acceleration to rated speed may be used for this SR as recommended by the manufacturer. When modified start procedures are not used, the time, voltage, and frequency tolerances of SR 3.8.1.7 must be met. <p>-----</p> <p>Verify each DG starts from standby conditions and achieves:</p> <ol style="list-style-type: none"> a. Steady state voltage ≥ 4297 V and ≤ 4576 V; and b. Steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz. 	<p>As specified in Table 3.8.1-1</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.7 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify each DG starts from standby condition and:</p> <ol style="list-style-type: none"> a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz; b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; and c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz. 	<p>184 days</p>
<p>SR 3.8.1.8 -----NOTE-----</p> <ol style="list-style-type: none"> 1. Credit may be taken for unplanned events that satisfy this SR. 2. Testing to satisfy this SR shall include actual automatic and manual transfer to at least one alternate offsite circuit. The other alternate offsite circuit may be verified by overlapping circuit tests. <p>-----</p> <p>Verify capability of automatic and manual transfer of AC power sources from the normal offsite circuit to each alternate required offsite circuit.</p>	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.9 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG rejects a load greater than or equal to its associated single largest post-accident load, and:</p> <ul style="list-style-type: none"> a. Following load rejection, the frequency is ≤ 66.75 Hz; b. Within 4 seconds following load rejection, the voltage is ≥ 4297 V and ≤ 4576 V; and c. Within 4 seconds following load rejection, the frequency is ≥ 59.7 Hz and ≤ 61.2 Hz. 	<p>24 months</p>
<p>SR 3.8.1.10 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG, when connected to its bus in parallel with offsite power and operating with inductive loading that offsite power conditions permit, during and following a load rejection of ≥ 4450 kW and ≤ 4700 kW:</p> <ul style="list-style-type: none"> a. Does not trip; and b. Voltage is maintained ≤ 5450 V. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.11 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; c. DG auto-starts from standby condition and: <ol style="list-style-type: none"> 1. energizes permanently connected loads and resets the 4.16kV bus undervoltage relay logic in ≤ 10 seconds; 2. maintains steady state voltage ≥ 4297 V and ≤ 4576 V; 3. maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 4. supplies permanently connected loads for ≥ 5 minutes. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify on an actual or simulated SIAS, each DG auto-starts from standby condition and:</p> <ol style="list-style-type: none"> a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz; b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and d. Operates for ≥ 5 minutes. 	<p>24 months</p>
<p>SR 3.8.1.13 -----NOTE-----</p> <p>Credit may be taken for unplanned events that satisfy this SR.</p> <p>-----</p> <p>Verify each DG automatic trip is bypassed on actual or simulated SIAS except:</p> <ol style="list-style-type: none"> a. Engine overspeed; b. Generator differential current; and c. Low-low lube oil pressure. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.14 -----NOTES-----</p> <ol style="list-style-type: none"> 1. Momentary transients outside the load range does not invalidate this test. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify each DG, when connected to its bus in parallel with offsite power and operating with inductive loading that offsite power conditions permit, operates for ≥ 24 hours:</p> <ol style="list-style-type: none"> a. For ≥ 2 hours loaded ≥ 4935 kW and ≤ 5170 kW; and b. For the remaining hours of the test loaded ≥ 4450 kW and ≤ 4700 kW. 	<p>24 months</p>
<p>SR 3.8.1.15 -----NOTES-----</p> <ol style="list-style-type: none"> 1. This Surveillance shall be performed within 5 minutes of shutting down the DG after the DG has operated ≥ 2 hours loaded ≥ 4450 kW and ≤ 4700 kW. <p>Momentary transients outside the load range do not invalidate this test.</p> <ol style="list-style-type: none"> 2. All DG starts may be preceded by an engine prelube period. <p>-----</p> <p>Verify each DG starts and:</p> <ol style="list-style-type: none"> a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz; b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and d. Operates for ≥ 5 minutes. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.16 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG:</p> <ul style="list-style-type: none"> a. Is capable of being synchronized with offsite power while loaded with emergency loads upon a simulated restoration of offsite power; b. Transfers loads to offsite power source; and c. Returns to ready-to-load operation, with: <ul style="list-style-type: none"> 1. steady state voltage ≥ 4297 V and ≤ 4576 V; 2. steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 3. the DG output breaker open. 	<p>24 months</p>
<p>SR 3.8.1.17 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify, with a DG operating in test mode and connected to its bus in parallel with offsite power, an actual or simulated SIAS overrides the test mode by:</p> <ul style="list-style-type: none"> a. Returning the DG to ready-to-load operation, with: <ul style="list-style-type: none"> 1. steady state voltage ≥ 4297 V and ≤ 4576 V; 2. steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 3. the DG output breaker open; and b. Automatically energizing the emergency loads from offsite power. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.19 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal in conjunction with actual or simulated ESF actuation signals:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; c. DG auto-starts from standby condition and: <ol style="list-style-type: none"> 1. energizes permanently connected loads and resets the 4.16 kV bus undervoltage relay logic in ≤ 10 seconds; 2. energizes auto-connected emergency loads through the programmed time interval load sequence; 3. achieves steady state voltage ≥ 4297 V and ≤ 4576 V; 4. achieves steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 5. supplies permanently connected and auto-connected emergency loads for ≥ 5 minutes. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 -----NOTE----- All DG starts may be preceded by an engine prelube period. -----</p> <p>Verify, when started simultaneously from standby condition, each DG:</p> <p>a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz;</p> <p>b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; and</p> <p>c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz.</p>	<p>10 years</p>



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

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 149
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 June 18, 1997, as supplemented May 24 and August 10, 1999, 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. 149, 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 30 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Stephen Dembek, Chief, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 9, 1999

ATTACHMENT TO LICENSE AMENDMENT NO. 149

FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Replace the following pages of the 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.

REMOVE

INSERT

3.8-4

3.8-4

3.8-5

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3.8-7

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3.8-11

3.8-11

3.8-11a

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3.8-12

3.8-12

3.8-14

3.8-14

3.8-15

3.8-15

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
F. Required Action and Associated Completion Time of Condition A, B, C, D, or E not met.	F.1 Be in MODE 3.	6 hours
	<u>AND</u> F.2 Be in MODE 5.	36 hours
G. Three or more required AC sources inoperable.	G.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.8.1.1 -----NOTES----- 1. Buses 2A04 and 2D1 are required when unit crosstie breaker 2A0417 is used to provide a source of AC power. 2. Buses 2A06 and 2D2 are required when unit crosstie breaker 2A0619 is used to provide a source of AC power. ----- Verify correct breaker alignment and power availability for each required offsite circuit.	7 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.2 -----NOTES-----</p> <ol style="list-style-type: none"> 1. Performance of SR 3.8.1.7 satisfies this SR. 2. All DG starts may be preceded by an engine prelube period and followed by a warmup period prior to loading. 3. A modified DG start involving idling and gradual acceleration to rated speed may be used for this SR as recommended by the manufacturer. When modified start procedures are not used, the time, voltage, and frequency tolerances of SR 3.8.1.7 must be met. <p>-----</p> <p>Verify each DG starts from standby conditions and achieves:</p> <ol style="list-style-type: none"> a. Steady state voltage ≥ 4297 V and ≤ 4576 V; and b. Steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz. 	<p>As specified in Table 3.8.1-1</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.7 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify each DG starts from standby condition and:</p> <ol style="list-style-type: none"> a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz; b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; and c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz. 	<p>184 days</p>
<p>SR 3.8.1.8 -----NOTE-----</p> <ol style="list-style-type: none"> 1. Credit may be taken for unplanned events that satisfy this SR. 2. Testing to satisfy this SR shall include actual automatic and manual transfer to at least one alternate offsite circuit. The other alternate offsite circuit may be verified by overlapping circuit tests. <p>-----</p> <p>Verify capability of automatic and manual transfer of AC power sources from the normal offsite circuit to each alternate required offsite circuit.</p>	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.9 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG rejects a load greater than or equal to its associated single largest post-accident load, and:</p> <ul style="list-style-type: none"> a. Following load rejection, the frequency is ≤ 66.75 Hz; b. Within 4 seconds following load rejection, the voltage is ≥ 4297 V and ≤ 4576 V; and c. Within 4 seconds following load rejection, the frequency is ≥ 59.7 Hz and ≤ 61.2 Hz. 	<p>24 months</p>
<p>SR 3.8.1.10 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG, when connected to its bus in parallel with offsite power and operating with inductive loading that offsite power conditions permit, during and following a load rejection of ≥ 4450 kW and ≤ 4700 kW:</p> <ul style="list-style-type: none"> a. Does not trip; and b. Voltage is maintained ≤ 5450 V. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.11 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; c. DG auto-starts from standby condition and: <ol style="list-style-type: none"> 1. energizes permanently connected loads and resets the 4.16kV bus undervoltage relay logic in ≤ 10 seconds; 2. maintains steady state voltage ≥ 4297 V and ≤ 4576 V; 3. maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 4. supplies permanently connected loads for ≥ 5 minutes. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.12 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify on an actual or simulated SIAS, each DG auto-starts from standby condition and:</p> <ol style="list-style-type: none"> a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz; b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; and c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz. d. Operates for ≥ 5 minutes. 	<p>24 months</p>
<p>SR 3.8.1.13 -----NOTE-----</p> <p>Credit may be taken for unplanned events that satisfy this SR.</p> <p>-----</p> <p>Verify each DG automatic trip is bypassed on actual or simulated SIAS except:</p> <ol style="list-style-type: none"> a. Engine overspeed; b. Generator differential current; and c. Low-low lube oil pressure. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.14 -----NOTES-----</p> <ol style="list-style-type: none"> 1. Momentary transients outside the load range does not invalidate this test. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify each DG, when connected to its bus in parallel with offsite power and operating with inductive loading that offsite power conditions permit, operates for ≥ 24 hours:</p> <ol style="list-style-type: none"> a. For ≥ 2 hours loaded ≥ 4935 kW and ≤ 5170 kW; and b. For the remaining hours of the test loaded ≥ 4450 kW and ≤ 4700 kW. 	<p>24 months</p>
<p>SR 3.8.1.15 -----NOTES-----</p> <ol style="list-style-type: none"> 1. This Surveillance shall be performed within 5 minutes of shutting down the DG after the DG has operated ≥ 2 hours loaded ≥ 4450 kW and ≤ 4700 kW. <p>Momentary transients outside the load range do not invalidate this test.</p> <ol style="list-style-type: none"> 2. All DG starts may be preceded by an engine prelube period. <p>-----</p> <p>Verify each DG starts and:</p> <ol style="list-style-type: none"> a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz; b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and d. Operates for ≥ 5 minutes. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.16 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify each DG:</p> <ol style="list-style-type: none"> a. Is capable of being synchronized with offsite power while loaded with emergency loads upon a simulated restoration of offsite power; b. Transfers loads to offsite power source; and c. Returns to ready-to-load operation, with: <ol style="list-style-type: none"> 1. steady state voltage ≥ 4297 V and ≤ 4576 V; 2. steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 3. the DG output breaker open. 	<p>24 months</p>
<p>SR 3.8.1.17 -----NOTE----- Credit may be taken for unplanned events that satisfy this SR. -----</p> <p>Verify, with a DG operating in test mode and connected to its bus in parallel with offsite power, an actual or simulated SIAS overrides the test mode by:</p> <ol style="list-style-type: none"> a. Returning the DG to ready-to-load operation, with: <ol style="list-style-type: none"> 1. steady state voltage ≥ 4297 V and ≤ 4576 V; 2. steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 3. the DG output breaker open; and b. Automatically energizing the emergency loads from offsite power. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.19 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. Credit may be taken for unplanned events that satisfy this SR. <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal in conjunction with actual or simulated ESF actuation signals:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; c. DG auto-starts from standby condition and: <ol style="list-style-type: none"> 1. energizes permanently connected loads and resets the 4.16 kV bus undervoltage relay logic in ≤ 10 seconds; 2. energizes auto-connected emergency loads through the programmed time interval load sequence; 3. achieves steady state voltage ≥ 4297 V and ≤ 4576 V; 4. achieves steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz; and 5. supplies permanently connected and auto-connected emergency loads for ≥ 5 minutes. 	<p>24 months</p>

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.20 -----NOTE----- All DG starts may be preceded by an engine prelube period. -----</p> <p>Verify, when started simultaneously from standby condition, each DG:</p> <p>a. In ≤ 9.4 seconds, achieves voltage ≥ 4297 V and frequency ≥ 59.7 Hz;</p> <p>b. Maintains steady state voltage ≥ 4297 V and ≤ 4576 V; and</p> <p>c. Maintains steady state frequency ≥ 59.7 Hz and ≤ 61.2 Hz.</p>	<p>10 years</p>



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 158 TO FACILITY OPERATING LICENSE NO. NPF-10
AND AMENDMENT NO. 149 TO FACILITY OPERATING LICENSE NO. NPF-15
SOUTHERN CALIFORNIA EDISON COMPANY
SAN DIEGO GAS AND ELECTRIC COMPANY
THE CITY OF RIVERSIDE, CALIFORNIA
THE CITY OF ANAHEIM, CALIFORNIA
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3
DOCKET NOS. 50-361 AND 50-362

1.0 INTRODUCTION

By application dated June 18, 1997 (PCN-478), as supplemented May 24 and August 10, 1999, Southern California Edison Company (SCE or the licensee) proposed changes to San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 Technical Specification (TS) Surveillance Requirements (SRs) related to diesel generator (DG) testing to more clearly reflect safety analysis and testing conditions as it is performed. The proposed changes would revise TS 3.8.1, SR 3.8.1.1 (Unit 3 only), 3.8.1.2, 3.8.1.7, 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.13, 3.8.1.14, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.19, and 3.8.1.20, and the associated Bases.

On December 31, 1997, the NRC noticed in the *Federal Register* (FR) the licensee's proposed changes and basis for proposed no significant hazards consideration determination (62 FR 68315). The licensee's letters dated May 24 and August 10, 1999, provided updated TS pages, clarifications, and additional information that were within the scope of the original FR notice and did not change the staff's initial proposed no significant hazards consideration determination.

2.0 EVALUATION

The licensee proposed the following changes to the SONGS Units 2 and 3 TSs.

- 2.1 The proposed revision to SR 3.8.1.1 is to indicate corrected Unit 2 cross-tie breaker numbers. The change is applicable to Unit 3 only. The licensee states that these breaker numbers were inadvertently revised in Amendment 116. The staff finds the above change to be editorial and acceptable.

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- 2.2 SR 3.8.1.2 currently requires verification that each DG starts from standby conditions and achieves steady-state voltage ≥ 3924 V and ≤ 4796 V, and frequency ≥ 58.8 Hz (hertz) and ≤ 61.2 Hz. The proposed change would provide the correct voltage and frequency limits for DG operability. The lower voltage limit is changed from 3924 V to 4297 V. This is the voltage that the DG must achieve to reset the 4.16 kV (kilovolt) engineered safety features (ESF) bus undervoltage relays to allow ESF load sequencing to initiate. The undervoltage relay reset is a permissive that must be satisfied to initiate the ESF load sequence timers when an ESF actuation signal is present. The upper voltage limit is changed from 4796 V to 4576 V to be consistent with the maximum allowable steady-state voltage for 4.16 kV motors (110% of 4160 V).

The lower frequency limit is changed from 58.8 Hz to 59.7 Hz. The lower frequency limit is equal to -0.5% of the 60 Hz nominal frequency and is based on maintaining acceptable high pressure safety injection system performance as assumed in the accident analyses.

The staff finds the proposed voltage and frequency limits to be more conservative than the current TS limits and therefore acceptable.

Additionally, the acceptance criteria are reformatted. The steady-state voltage limits and steady-state frequency limits are now referred to as acceptance criteria 'a' and 'b', respectively. The staff finds these changes to be editorial and acceptable.

- 2.3 SR 3.8.1.7 currently requires verification that each DG starts from standby conditions and achieves, in ≤ 10 seconds, voltage ≥ 3924 V and ≤ 4796 V, and frequency ≥ 58.8 Hz and ≤ 61.2 Hz. The licensee has proposed to change the timing requirement for achieving the required DG voltage and frequency limits from 10 seconds to 9.4 seconds. The proposed change would now require that the DG achieve the voltage and frequency in ≤ 9.4 seconds. SR 3.8.1.7 is also revised to provide the correct voltage and frequency limits for EDG operability as discussed in SR 3.8.1.2 (item 2.2) above. The 9.4-second requirement ensures that the DG meets the assumptions of the design-basis loss-of-coolant accident (LOCA) analysis, i.e., the DG starts, accelerates to the required frequency and voltage, connects to the 4.16 kV ESF bus, and resets the ESF bus undervoltage relay logic within 10 seconds of a safety injection actuation signal (SIAS). Since this surveillance starts the DG but does not close the DG output breaker, the time requirement is reduced by 0.6 second (from 10 seconds to 9.4 seconds). This ensures that sufficient time exists to subsequently close the DG output breaker and reset the undervoltage relay logic without exceeding the overall 10-second start time assumed in the analysis. The 9.4-second time requirement is more conservative than the current TS limits and is, therefore, acceptable.

In addition, the SR requires that the DG maintain steady-state voltage ≥ 4297 V and ≤ 4576 V, and frequency ≥ 59.7 Hz and ≤ 61.2 Hz. The staff informed the licensee that the proposed change does not specify the time when the DG actually achieves steady-state voltage ≥ 4297 V and ≤ 4576 V, and frequency ≥ 59.7 Hz and ≤ 61.2 Hz. The time for a DG to reach steady-state required voltage and frequency is important to ensure that the DG meets its design basis and this time must be monitored and trended to assure that there is no degradation of the governor and the voltage regulator.

Subsequently, by letter dated May 24, 1999, the licensee proposed to add the following sentence to the TS Bases for SR 3.8.1.7, 3.8.12, and 3.8.1.15:

In addition to the SR requirements, the time for the DG to reach steady-state operation, unless the modified DG start method is employed, is periodically monitored and is evaluated to identify degradation of governor and voltage regulator performance.

The above satisfies the staff's concern and is acceptable.

In addition, the acceptance criteria are reformatted. Acceptance criterion 'a' shows the voltage and frequency limits for the timing requirement. The steady-state voltage and frequency limits are now referred to as acceptance criteria 'b' and 'c', respectively. Note two is added to credit any unplanned events that may satisfy this SR. The staff finds the above changes to be editorial and acceptable.

- 2.4 SR 3.8.1.10 currently requires verification that each DG, when operating with design-basis kW loading and maximum kVAR (kV amperes reactive) loading permitted during testing does not trip and voltage is maintained ≤ 5450 V during and following a load rejection of ≥ 4450 kW (kilowatt) and ≤ 4700 kW.

The licensee has proposed to revise SR 3.8.1.10 to clarify the conditions under which the DG full load rejection test is performed. The term "connected to its bus in parallel with offsite power" is added to indicate that the test is performed with the DG connected in parallel with the grid. The reference to "design-basis kW loading" is removed; instead the required kW load range is specified in the SR as ≥ 4450 kW and ≤ 4700 kW. The licensee states that with the specified load limits, the reference to design-basis kW loading is not necessary. The staff agrees and concludes that the change is acceptable.

The phrase "maximum kVAR loading permitted during testing" is replaced by "inductive loading that offsite power conditions permit." This is to clarify that the kVAR load on the DG during this test may be limited by offsite power conditions. The licensee states that offsite power conditions directly affect the voltage on the ESF buses. When the DG is connected to the ESF bus in parallel with the offsite source, increasing the DG output voltage increases the DG VAR output. If the bus voltage is already high due to high grid voltage, increasing the DG VAR output may cause the bus voltage to exceed allowable limits. Similarly, these test conditions could cause an overexcitation condition to occur in the generator or exciter. The plant test procedure recognizes these limitations and contains restrictions to prevent equipment limits from being exceeded. Therefore, the SR is clarified to indicate that the test is performed under inductive load conditions that are as close to design-basis conditions as possible subject to offsite power conditions. Based on the above, the staff concludes that in order to ensure that the DG is not placed in an unsafe condition during the test, the test may be performed under inductive load conditions that are as close to design-basis conditions as possible, subject to offsite power conditions. The licensee has revised this SR to clarify the above. Therefore, the staff finds the proposed change to be acceptable.

Additionally, the acceptance criteria are reformatted. The "does not trip" requirement is now referred to as acceptance criterion 'a' and the maximum voltage limit is now referred to as acceptance criterion 'b.' The staff finds these changes to be editorial and acceptable.

- 2.5 The licensee has proposed to revise SR 3.8.1.11 to clarify that, in addition to the DG connecting to the ESF bus and energizing the permanently connected loads, DG voltage must also be high enough to reset the 4.16 kV bus undervoltage relay logic within 10 seconds. This ensures that the DG meets assumptions of the design-basis LOCA analysis, which assumes that the DG starts, accelerates to the required frequency and voltage, connects to the 4.16 kV ESF bus, and resets the ESF bus undervoltage relay logic within 10 seconds of an SIAS. Undervoltage relay logic reset is a permissive that must be satisfied to initiate the ESF load sequence timers when an SIAS is present.

Additionally, acceptance criteria c.2 and c.3 are revised to provide the correct voltage and frequency limits for steady-state operation as discussed in SR 3.8.1.2 (item 2.2) above.

The staff finds the above changes to be more conservative than current TS requirements and, therefore, acceptable.

- 2.6 SR 3.8.1.12 currently requires verification that on an actual or simulated ESF actuation signal each DG auto-starts from standby condition and achieves, in ≤ 10 seconds, voltage ≥ 3924 V and ≤ 4796 V, and frequency ≥ 58.8 Hz and ≤ 61.2 Hz. The licensee has proposed to revise the SR to clarify that the ESF signal that initiates a DG start is an SIAS signal. This change eliminates the ambiguity that exists in the existing SR by referring to a specific signal (SIAS) rather than ESF actuation signal. The staff finds the proposed change to be editorial and acceptable.

The licensee has also proposed to revise SR 3.8.1.12 to change the timing requirement for achieving the required DG voltage and frequency from 10 seconds to 9.4 seconds. This SR is also revised to provide the correct voltage and frequency limits for DG operability. The proposed change now would require that the DG achieves in ≤ 9.4 seconds the voltage ≥ 4297 V and frequency ≥ 59.7 Hz. The DG maintains steady-state voltage ≥ 4297 V and ≤ 4576 V, and frequency ≥ 59.7 Hz and ≤ 61.2 Hz. The proposed changes are acceptable as discussed in SR 3.8.1.7 and SR 3.8.1.2 (items 2.2 and 2.3) above.

Additionally, the acceptance criteria are reformatted. The acceptance criterion 'a' shows the voltage and frequency limits for the timing requirement and steady-state voltage and frequency limits are now referred to as criteria 'b' and 'c', respectively. The requirement to operate for greater than or equal to 5 minutes is now referred to as acceptance criterion 'd'. The staff finds the above changes to be editorial and acceptable.

- 2.7 SR 3.8.1.13 currently requires verification that each DG automatic trip is bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal.

The licensee has proposed to revise SR 3.8.1.13 to eliminate reference to the "loss of voltage signal" (LOVS). This change would allow the non-critical trip feature to be tested under SIAS conditions only. The licensee states that the DG non-critical trips are bypassed by an SIAS signal, but are not affected by the presence or absence of LOVS.

Under postulated SIAS-LOVS conditions, the DG starts and connects to the 4.16 kV ESF bus. The ESF bus voltage will increase to and remain above the reset voltage of the LOVS relays. The LOVS relays will reset. The non-critical trips will remain bypassed due to the SIAS. Since the LOVS has no effect on the bypassing of the non-critical trips, testing only the bypassing of non-critical trips under SIAS condition provides a valid test of the non-critical trip bypass feature. The staff agrees and concludes the change is acceptable.

This SR is also revised to clarify that the ESF actuation signal that bypasses the non-critical trips is an SIAS. This change eliminates the ambiguity that exists in the existing SR by referring to a specific signal rather than a general term (ESF actuation signal). The staff finds that this proposed change simply clarifies the signal that actually bypasses the non-critical trips during this SR, and therefore the proposed change is acceptable.

- 2.8 SR 3.8.1.14 currently requires verification that each DG operating with the maximum kVAR loading permitted during testing operates for 24 hours. In SR 3.8.1.14, the phrase "maximum kVAR loading permitted during testing" is revised to clarify that the kVAR load on the DG during this test may be limited by offsite conditions. The wording "maximum kVAR" is replaced by "inductive loading." The staff finds the above change to be acceptable as discussed in SR 3.8.1.10 (item 2.4) above.

In Note 1, the reference to power factor is removed because the power factor is no longer mentioned in this SR. For Unit 3, SR 3.8.1.14 is also revised to delete a note that is no longer applicable. The staff finds the above changes to be editorial and acceptable.

- 2.9 SR 3.8.1.15 currently requires that this SR be performed within 5 minutes of shutting down the DG after the DG has operated ≥ 2 hours loaded ≥ 4450 kW and ≤ 4700 kW and verify that each DG starts and achieves, in ≤ 10 seconds, voltage ≥ 3924 V and ≤ 4796 V, and frequency ≥ 58.8 Hz and ≤ 61.2 Hz. The licensee has proposed to change the timing requirement for achieving the required DG voltage and frequency from 10 seconds to 9.4 seconds. SR 3.8.1.15 is also revised to provide the correct voltage and frequency limits for DG operability as discussed in SR 3.8.1.2 above (item 2.2). The proposed change would now require that the DG achieve in ≤ 9.4 seconds the voltage ≥ 4297 V and frequency ≥ 59.7 Hz. The DG maintains steady-state voltage ≥ 4297 V and ≤ 4576 V, and frequency ≥ 59.7 Hz and ≤ 61.2 Hz. The staff finds the proposed changes to be acceptable as discussed in SR 3.8.1.7 (item 2.2) above.

Additionally, in Note 1, the term "outside of load range...." is revised to "outside the load change...."

For Unit 3, SR 3.8.1.15 is revised to delete a note that is no longer applicable.

The acceptance criteria are also reformatted. Acceptance criterion 'a' shows the voltage and frequency limits for the timing requirements and steady-state voltage and frequency limits are now referred to as acceptance criteria 'b' and 'c', respectively. The requirement to operate for greater than or equal to 5 minutes is now referred to as acceptance criterion 'd'.

The staff finds these changes to be editorial and acceptable.

- 2.10 SR 3.8.1.16 is revised to indicate that the DG is manually synchronized with the offsite power source during this test. In acceptance criterion 'c', the term "ready-to-load operation" is clarified to be consistent with the definition provided in the Bases for this SR. The staff finds that the above changes simply clarify the intent of the SR and are acceptable.

Additionally, the licensee has proposed to add steady-state voltage and frequency limits as acceptance criteria 'c.1' and 'c.2'. The requirement for the DG breaker to be open is also added as acceptance criterion 'c.3'. The staff finds the proposed changes to be conservative and acceptable.

- 2.11 SR 3.8.1.17 is revised to indicate that the test is performed with the DG connected in parallel with the grid. This SR is also revised to clarify that the ESF actuation signal that overrides the test mode is an SIAS. This change eliminates the ambiguity that exists in the existing SR by referring to SIAS rather than a general term (ESF actuation signal).

Acceptance criterion 'a' is revised to clarify the term "ready to load operation." This change is consistent with the definition provided in the Bases for this SR.

The staff finds that the above changes simply clarify the intent of the SR and are acceptable.

Additionally, the steady-state voltage and frequency limits are added as acceptance criteria 'a.1' and 'a.2'. The requirement for the DG breaker to be open is added as acceptance criterion 'a.3'. The staff finds the proposed changes to be conservative and acceptable.

- 2.12 SR 3.8.1.19c.1 is revised to clarify that, in addition to the DG connecting to the ESF bus and energizing the permanently connected loads, DG voltage must be high enough to reset the 4.16 kV bus undervoltage relay logic within 10 seconds. This ensures that the DG meets the assumptions of the design-basis LOCA analyses which assume that the DG starts, accelerates to the required frequency and voltage, connects to the 4.16 kV ESF bus, and resets the ESF bus undervoltage relay logic within 10 seconds of an SIAS. Undervoltage relay logic reset is a permissive that must be satisfied to initiate the ESF load sequence timers when an SIAS is present. The staff finds the proposed change to be conservative and therefore acceptable.

Additionally, the acceptance criteria 'c.3' and 'c.4' are revised to provide the correct voltage and frequency limits for steady-state operation. These changes are acceptable as discussed in SR 3.8.1.2 (item 2.2) above.

- 2.13 SR 3.8.1.20 currently requires verification that when started simultaneously from standby conditions, each DG achieves, in ≤ 10 seconds, voltage ≥ 3924 V and ≤ 4796 V, and frequency ≥ 58.8 Hz and ≤ 61.2 Hz. The licensee has proposed to change the timing requirement for achieving the required voltage and frequency limits from 10 seconds to 9.4 seconds. SR 3.8.1.20 is also revised to provide the correct voltage and frequency limits for DG operability as discussed in SR 3.8.1.2 (item 2.2) above. The proposed change would now require that the DG achieve in ≤ 9.4 seconds the voltage ≥ 4297 V and frequency ≥ 59.7 Hz. The DG maintains steady-state voltage ≥ 4297 V and ≤ 4576 V, and frequency ≥ 59.7 Hz and ≤ 61.2 Hz. The proposed change is acceptable as discussed in SR 3.8.1.7 (item 2.3) above.

Additionally, the acceptance criteria are reformatted. Acceptance criterion 'a' shows the voltage and frequency limits for the timing requirement and the steady-state voltage and frequency limits are now referred to as criterion 'b' and 'c', respectively. The staff finds the proposed change to be editorial and acceptable.

3.0 SUMMARY

The staff concludes that the proposed changes to SONGS Units 2 and 3 TS 3.8.1, "AC Sources-Operating," SRs 3.8.1.1 (Unit 3 only) , 3.8.1.2, 3.8.1.7, 3.8.1.10, 3.8.1.11, 3.8.1.12, 3.8.1.13, 3.8.1.14, 3.8.1.15, 3.8.1.16, 3.8.1.17, 3.8.1.19, and 3.8.1.20 and the associated Bases are acceptable.

4.0 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.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change surveillance requirements. 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 (62 FR 68315). 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.

6.0 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.

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Date: September 9, 1999