



SOUTHERN CALIFORNIA
EDISON®

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Dwight E. Nunn
Vice President

July 28, 2003

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

**SUBJECT: San Onofre Nuclear Generating Station Units 2 and 3
Docket Nos. 50-361 and 50-362
Proposed Change Number (PCN) 545
Request To Revise Technical Specifications 3.3.1 and 3.3.5**

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Southern California Edison (SCE) hereby requests the following amendment: Revise Technical Specifications 3.3.1, "RPS Instrumentation – Operating," and 3.3.5, "ESFAS Instrumentation," to change the Steam Generator Pressure–Low allowable value from its current value of 729 psia to a revised value of 717 psia. SCE has evaluated this request under the standards set forth in 10 CFR 50.92(c) and has concluded that a finding of "no significant hazards consideration" is justified.

SCE requests approval of the proposed amendments by January 9, 2004 in order to allow time for implementation before startup from the scheduled Unit 2 Cycle 13 refueling outage. Once approved, the amendments shall be implemented within 60 days.

Attachment G contains information proprietary to Westinghouse. Attachment H is an affidavit signed by Westinghouse, the owner of the information, setting forth the basis on which the information may be withheld from public consideration by the Commission and addresses with specificity the consideration listed in paragraph (b)(4) of 10 CFR Section 2.790 of the Commission's regulations. SCE requests this information be withheld from public disclosure. Because the vast majority of the information contained in Attachment G is considered proprietary, it is not practical to provide a nonproprietary version.

APOI

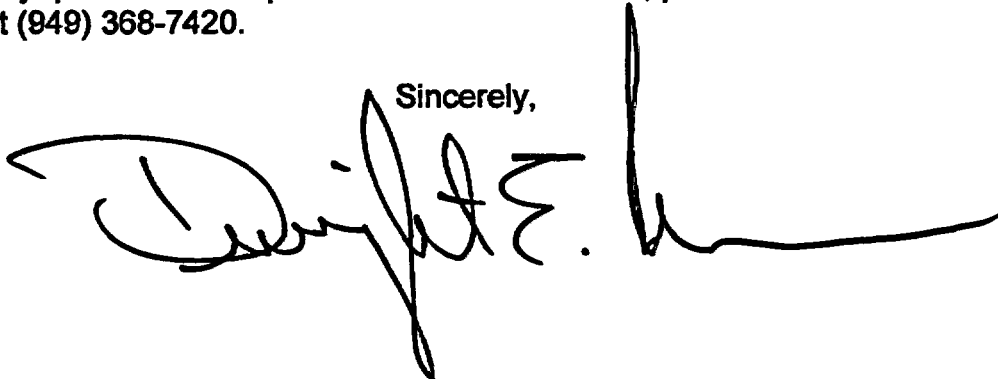
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July 28, 2003

SCE is making no formal commitments that would result from NRC approval of the proposed amendments.

If you have any questions or require additional information, please contact Mr. Jack Rainsberry at (949) 368-7420.

Sincerely,

A handwritten signature in black ink, appearing to read "Dwight E. L.", with a long horizontal flourish extending to the right.

Enclosures:

1. Notarized affidavits
2. Licensee's evaluation of the proposed change(s)

Attachments:

- A. Existing Technical Specification pages, Unit 2
- B. Existing Technical Specification pages, Unit 3
- C. Markup of Technical Specification pages, Unit 2
- D. Markup of Technical Specification pages, Unit 3
- E. Retyped Technical Specification pages, Unit 2
- F. Retyped Technical Specification pages, Unit 3
- G. SONGS, Units 2 & 3, Plant Protection System Setpoint Calculation (Westinghouse proprietary)
- H. Affidavit supporting withholding Attachment G from public disclosure

cc: T. P. Gwynn, NRC Region IV, Acting Regional Administrator*
B. M. Pham, NRC Project Manager, San Onofre Units 2 and 3
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 and 3*
S. Y. Hsu, Department of Health Services, Radiologic Health Branch*

* w/o enclosures G-H

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA)
EDISON COMPANY, ET AL. for a Class 103)
License to Acquire, Possess, and Use)
a Utilization Facility as Part of)
Unit No. 2 of the San Onofre Nuclear)
Generating Station)

Docket No. 50-361

Amendment Application No. 221

SOUTHERN CALIFORNIA EDISON COMPANY, et al. pursuant to 10CFR50.90, hereby submit Amendment Application No. 221. This amendment application consists of Proposed Change Number (PCN) 545 to Facility Operating License NPF-10. PCN-545 is a request to revise Technical Specification (TS) 3.3.1, "RPS Instrumentation – Operating," and TS 3.3.5, "ESFAS Instrumentation," to change the Steam Generator Pressure—Low allowable value from its current value of ≥ 729 psia to a revised value of ≥ 717 psia.

State of California
County of San Diego

Subscribed and sworn to (or affirmed) before me this 28th day of
July, 2003.

By: 

Dwight E. Nunb
Vice President


Notary Public



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA)
EDISON COMPANY, ET AL. for a Class 103)
License to Acquire, Possess, and Use)
a Utilization Facility as Part of)
Unit No. 3 of the San Onofre Nuclear)
Generating Station)

Docket No. 50-362

Amendment Application No. 206

SOUTHERN CALIFORNIA EDISON COMPANY, et al. pursuant to 10CFR50.90, hereby submit Amendment Application No. 206. This amendment application consists of Proposed Change Number (PCN) 545 to Facility Operating License NPF-15. PCN-545 is a request to revise Technical Specification (TS) 3.3.1, "RPS Instrumentation – Operating," and TS 3.3.5, "ESFAS Instrumentation," to change the Steam Generator Pressure—Low allowable value from its current value of ≥ 729 psia to a revised value of ≥ 717 psia.

State of California
County of San Diego

Subscribed and sworn to (or affirmed) before me this 28th day of

July, 2003.

By: Dwight E. Nunn
Dwight E. Nunn
Vice President

Mariane Sanchez
Notary Public



LICENSEE'S EVALUATION
Proposed Change Number 545

Subject: Request To Revise Technical Specifications 3.3.1, "RPS Instrumentation – Operating," and 3.3.5, "ESFAS Instrumentation"

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1.0 DESCRIPTION

This letter is a request to amend Operating Licenses NPF-10 and NPF-15 for San Onofre Nuclear Generating Station Units 2 and 3 (SONGS 2 & 3), respectively.

The proposed change would amend the Operating Licenses to revise Technical Specifications 3.3.1, "RPS Instrumentation – Operating," and 3.3.5, "ESFAS Instrumentation," to change the Steam Generator Pressure – Low allowable value from its current value of 729 psia to a revised value of 717 psia.

2.0 PROPOSED CHANGE

Technical Specification Table 3.3.1-1, "Reactor Protective System Instrumentation," currently has an allowable value for functions 6, "Steam Generator 1 Pressure—Low," and 7, "Steam Generator 2 Pressure—Low," of 729 psia. The proposed change will revise these allowable values to 717 psia.

Technical Specification Table 3.3.5-1, "Engineered Safety Features Actuation System Instrumentation," currently has an allowable value for "Steam Generator Pressure—Low" of 729 psia for the following functions: 4.a, "Main Steam Isolation Signal;" 6.c, "Emergency Feedwater Actuation Signal SG #1;" 7.c, "Emergency Feedwater Actuation Signal SG #2." The proposed change will revise these three allowable values to 717 psia.

In summary, the proposed change is a request to lower the steam generator low pressure allowable value for reactor trip, Main Steam Isolation Signal, and Emergency Feedwater Actuation Signal from 729 psia to 717 psia.

The Technical Specification Bases do not cite the numerical value of the Steam Generator Pressure—Low allowable value. Consequently, SCE is not proposing a Bases change in this amendment request for purposes of changing the allowable value.

3.0 BACKGROUND

The Reactor Protection System (RPS) trips the reactor when either steam generator experiences low steam pressure, as determined by the Steam Generator Pressure—Low trip setpoint. The Steam Generator Pressure—Low signal also activates the Engineered Safety Features Actuation System (ESFAS) by generating a Main Steam Isolation Signal (MSIS) for closing the Main Steam Isolation Valves as a required response in the event of a Steam Line Break (SLB) incident. The signal also provides input to the Emergency Feedwater Actuation Signal (EFAS) logic circuit to prevent the feeding of a potentially ruptured steam generator.

The margin to plant trip on low steam generator pressure has progressively decreased through the years due to lower steam generator pressure at power caused by progressive plugging of steam generator tubes and the reduction in operating temperatures to reduce the impact of corrosion mechanisms on reactor coolant system materials. This proposed change lowers the allowable value of Steam Generator Pressure—Low, permitting the low

steam generator pressure trip setpoint to be lowered so as to provide additional margin during plant maneuvers and transients. The trip setpoint can be lowered to recover margin if the proposed change to the allowable value is approved. The proposed change to the allowable value is consistent with results of the current Revision 7 of ABB Combustion Engineering (ABB/CE) (now Westinghouse) calculation CE NPSD-570-P dated September 17, 1996, "SONGS Units 2 & 3 Plant Protection System Setpoint Calculation" (SONGS document SO23-944-C50 Revision 3 dated March 20, 1997). Revision 3 of the SONGS document derives the proposed Allowable Value of 717 psia based on a Steam Generator Low Pressure Analysis Setpoint of 675 psia, which is current for Accident Analyses in Chapter 15 of the Updated Final Safety Analysis Report (UFSAR). Revision 3 of the SONGS document is provided in Attachment G.

4.0 TECHNICAL ANALYSIS

The current Technical Specification Allowable Value of ≥ 729 psia for Steam Generator Pressure—Low is based on an MSIS Analytical Value of 678 psia used by Revision 5 (superseded) of ABB/CE (now Westinghouse) calculation CE NPSD-570-P dated December 11, 1995, "SONGS Units 2 & 3 Plant Protection System Setpoint Calculation" (SONGS document SO23-944-C50 Revision 1 dated January 17, 1996).

The proposed Allowable Value of ≥ 717 psia for Steam Generator Pressure—Low is based on an MSIS Analytical Value of 675 psia used by Revision 7 (current) of ABB/CE calculation CE NPSD-570-P dated September 17, 1996, "SONGS Units 2 & 3 Plant Protection System Setpoint Calculation" (SONGS document SO23-944-C50 Revision 3 dated March 20, 1997). See Attachment G. This calculation references SONGS Unit 3 Cycle 9 Reload Ground Rules (Document RGR-U3-C9 dated July 8, 1996) as the basis for selecting 675 psia as the analytical value. This calculation also reduces the random uncertainty in its methodology for setpoint determination based on SCE Engineering Design Standard JS-123-103C Revision 01 dated November 1993, "Instrument Setpoint/Loop Accuracy Calculation Methodology Standard."¹

The SONGS 2 & 3 UFSAR uses 675 psia as the analytical value for MSIS for Chapter 15 accident analyses as referenced in the following table.

¹ Revision 0 of this SCE Engineering Design Standard was reviewed by an NRC inspection team in 1991, as documented in an NRC inspection report transmitted on April 12, 1991. Revision 1 of the design standard eliminated sections of total loop uncertainty combinations and streamlined the format.

Reference	Analysis
Table 15.10.0-2	Reactor Protective System Trips used in the Safety Analyses
Table 15.10.1.3.1.1-2a	Unit 2(3) Cycle 12 Sequence of Events for the Outside Containment SLB Event Pre-Trip
Table 15.10.1.3.1.1-2b	Power Excursion with Loss-of-Offsite AC-Power
Table 15.10.1.3.1.1-2c	Unit 2(3) Cycle 12 Sequence of Events for the Inside Containment SLB Event Pre-Trip
Table 15.10.1.3.1.1-2d	Power Excursion with Loss-of-Offsite AC-Power
Table 15.10.1.3.1.2-2a	Unit 2(3) Cycle 12 Sequence of Events for the Inside Containment SLB Event Post-Trip
Table 15.10.1.3.1.2-2b	Return-To-Power HZP (*) with Loss-of-Offsite AC-Power
Table 15.10.1.3.1.2-2c	Unit 2(3) Cycle 12 Sequence of Events for the Inside Containment SLB Event Post-Trip
Table 15.10.1.3.1.2-2d	Return-To-Power HZP without Loss-of-Offsite AC-Power
Table 15.10.1.3.1.2-2e	Unit 2(3) Cycle 12 Sequence of Events for the Inside Containment SLB Event Post-Trip
Table 15.10.1.3.1.2-2f	Return-To-Power HFP (*) with Loss-of-Offsite AC-Power
Table 15.10.1.3.1.2-2g	Unit 2(3) Cycle 12 Sequence of Events for the Inside Containment SLB Event Post-Trip
Table 15.10.1.3.1.2-2h	Return-To-Power HFP without Loss-of-Offsite AC-Power
Table 15.10.2.3.1-2a	Sequence of Events for Feedwater System Pipe Break Event for Peak RCS Pressure, Unit 2(3)
Table 15.10.2.3.1-2b	Sequence of Events for Feedwater System Pipe Break Event for Peak Secondary Pressure, Unit 2(3)
Table 15.10.2.3.1-3b	
Section 15.1	Accident Analyses: Increase in Heat Removal by the Secondary System (Turbine Plant)
Section 15.2	Accident Analyses: Decrease in Heat Removal by the Secondary System (Turbine Plant)
Section 15.4	Accident Analyses: Reactivity and Power Distribution Anomalies
(*) Note: HZP is "Hot Zero Power", HFP is "Hot Full Power".	

The trip setpoint is obtained from the analytical value by adding the total channel error, including random uncertainty. Random uncertainty in the case of Steam Generator Pressure—Low is corrected for the fact that the parameter approaches the setpoint from one direction only: from above. This methodology was not used in Revision 5 of Reference 1, but is employed in Revision 7, submitted as Attachment G.

Using the current analytical value of 675 psia of UFSAR Chapter 15 accident analyses with the refined methodology for setpoint determination results in an allowable value of ≥ 717 psia. Therefore, the change to the allowable value in the Technical Specifications from ≥ 729 psia to ≥ 717 psia is being proposed.

As discussed above, the proposed allowable value is derived by the current Revision 7 of ABB/CE calculation CE NPSD-570-P, based on the current analytical value of UFSAR Chapter 15 accident analyses. Therefore, no changes to UFSAR Chapter 15 are required. However changes to UFSAR Chapters 7.2 and 7.3 on "Reactor Protective System" and "Engineered Safety Features System" will be required to revise the Low Steam Generator Pressure and MSIS/EFAS trip setpoint from the current value of 741 psia to 725 psia, as derived by the ABB/CE calculation. Lowering the setpoint would provide additional margin during plant maneuvers and transients under the current situation of lower steam generator pressure caused by progressive plugging of steam generator tubes.

In summary, the supporting calculation in Attachment G begins with an analysis setpoint of 675 psia and applies a total channel error of 49.839 psia to obtain a trip setpoint of 724.839 psia, which is rounded up to 725 psia. The trip setpoint minus the Plant Protection System Cabinet Periodic Test Error of 8.124 psia yields an allowable value of 716.715 psia, which is rounded up to 717 psia.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

Southern California Edison (SCE) is requesting amendments to the Technical Specifications for San Onofre Nuclear Generating Station Units 2 and 3 related to the Reactor Protective System (RPS) and the Engineered Safety Features Actuation System (ESFAS). The proposed amendments would revise Technical Specifications 3.3.1, "RPS Instrumentation – Operating," and 3.3.5, "ESFAS Instrumentation," to change the Steam Generator Pressure–Low allowable value from its current value of 729 psia to a revised value of 717 psia.

SCE has evaluated whether or not a significant hazards consideration is involved with the proposed amendments by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

Accidents evaluated in Chapter 15 of the Updated Final Safety Analysis Report use an analytical value of 675 psia for Steam Generator Pressure--Low and for the Main Steam Isolation Signal/Emergency Feedwater Actuation Signal, which is the basis for the proposed change to the allowable value. The current and proposed Allowable Values are 729 psia and 717 psia respectively, which means that a 12 psi reduction in margin between the Allowable Value and the Analytical Value is being proposed. Since the Trip Setpoint may not be below 717 psia (it would be at 725 psia as required by the supporting calculation), the proposed reduction in margin between the Allowable Value and the Analytical Value does not involve a significant increase in the consequences of an accident previously evaluated.

The proposed amendment has no effect on the probability of occurrence of accidents evaluated in Chapter 15 of the Updated Final Safety Analysis Report.

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

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

Response: No.

There will be no change to the design basis of the plant. There are no new anticipated operational occurrences, or design basis accidents. No changes to any other analytical limits are being made. The current Analytical Value for Steam Generator Pressure--Low is being retained, and no changes to any of the assumptions in the accident analyses are being proposed.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No.

The change in allowable value will not adversely affect the design analysis. The plant would trip on Steam Generator Pressure--Low at values at, or above, the analysis limit. The proposed change in the Allowable Value does not involve any change to the Analytical Value, so that the design bases limit is maintained.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, Southern California Edison concludes that the proposed amendments present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

1. 10 CFR 50.36(c)(1)(ii)(A), "Technical Specifications," states in part: "Limiting safety system settings for nuclear reactors are settings for automatic protective devices related to those variables having significant safety functions. Where a limiting safety system setting is specified for a variable on which a safety limit has been placed, the setting must be so chosen that automatic protective action will correct the abnormal situation before a safety limit is exceeded." The Bases for San Onofre Nuclear Generating Station Units 2 and 3 Limiting Condition For Operation 3.3.1, "Reactor Protection System Instrumentation – Operating," identify the Allowable Value as identical to the limiting safety system setting.

The proposed Allowable Value (limiting safety system setting) of 717 psia for Steam Generator Pressure--Low has been shown to account for instrument uncertainty with respect to the current analytical limit of 675 psia.

2. 10 CFR Part 50, Appendix A, Criterion 10, "Reactor design," states: The reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

The proposed Allowable Value of 717 psia for Steam Generator Pressure--Low accounts for instrument uncertainty with respect to the current analytical limit of 675 psia, which has been used for accident analyses in chapter 15 of the Updated Final Safety Analysis Report. Since there will be no change to the limits on low departure from nucleate boiling ratio or high local power density as set by the Core Protection Calculators, specified fuel design limits will not be exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

3. 10 CFR Part 50, Appendix A, Criterion 20, "Protection system functions," states: "The protection system shall be designed (1) to initiate automatically the operation of appropriate systems including the reactivity control systems, to assure that specified acceptable fuel design limits are not exceeded as a result of anticipated operational occurrences and (2) to sense accident conditions and to initiate the operation of systems and components important to safety."

The nominal value of protection system setpoint for automatic initiation of reactor trip on steam generator low pressure will be maintained at a more conservative (higher) value than the proposed Allowable value of 717 psia, to allow for changes in random measurement errors detectable by channel functional tests. Since there will be no change to the limits on low departure from nucleate boiling ratio or high local power density as set by the Core Protection Calculators, specified fuel design limits will not be exceeded during any condition of normal operation, including the effects of anticipated operational occurrences. The proposed Allowable Value of 717 psia has been shown to account for instrument uncertainty with respect to the current analytical limit of 675 psia for initiation of the Main Steam Isolation Signal and the Emergency Feedwater Actuation Signal for each steam generator.

In conclusion, based on the considerations discussed above, (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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7.0 REFERENCES

1. ABB/CE (now Westinghouse) calculation CE NPSD-570-P, Revision 7 (SONGS document SO23-944-C50 Revision 3)
2. CE memo S-PSA-224 dated December 19, 1978 from J.G. Pigott to P.C. Newcomb on "Plant Protection System Setpoints Used in Plant Engineering Analyses"
3. SONGS Unit 3 Cycle 9 Reload Ground Rules (Document RGR-U3-C9 dated July 8, 1996)
4. SCE Engineering Design Standard JS-123-103C Revision 01 dated November 1993, "Instrument Setpoint/Loop Accuracy Calculation Methodology Standard."

Attachment A

**Existing Technical Specification Pages
San Onofre Nuclear Generating Station
Unit 2**

Table 3.3.1-1 (page 1 of 2)
Reactor Protective System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Linear Power Level - High	1,2	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7 SR 3.3.1.8 SR 3.3.1.9 SR 3.3.1.13	≤ 111.0% RTP
2. Logarithmic Power Level - High ^(a)	2 ^(b)	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≤ .93% RTP
3. Pressurizer Pressure - High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 2385 psia
4. Pressurizer Pressure - Low ^(c)	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≥ 1700 psia
5. Containment Pressure - High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 3.4 psig
6. Steam Generator 1 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 729 psia
7. Steam Generator 2 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 729 psia

(continued)

(a) Trip must be enabled when logarithmic power is < 4E-5% RTP. Trip may be manually bypassed during physics testing pursuant to LCO 3.1.12.

(b) When any RTCB is closed.

(c) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

Table 3.3.5-1 (page 1 of 1)
Engineered Safety Features Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	ALLOWABLE VALUE
1. Safety Injection Actuation Signal(a)		
a. Containment Pressure - High	1,2,3	≤ 3.7 psig
b. Pressurizer Pressure - Low(b)		≥ 1700 psia
2. Containment Spray Actuation Signal(e)		
a. Containment Pressure - High-High	1,2,3	≤ 15.0 psig
3. Containment Isolation Actuation Signal		
a. Containment Pressure - High	1,2,3	≤ 3.7 psig
4. Main Steam Isolation Signal		
a. Steam Generator Pressure - Low(c)	1,2(d), 3(d)	≥ 729 psia
5. Recirculation Actuation Signal		
a. Refueling Water Storage Tank Level - Low	1,2,3,4	$19.27\% \geq \text{tap span} \geq 17.73\%$
6. Emergency Feedwater Actuation Signal SG #1 (EFAS-1)		
a. Steam Generator Level - Low	1,2,3	$\geq 20\%$
b. SG Pressure Difference - High		≤ 140 psid
c. Steam Generator Pressure - Low(c)		≥ 729 psia
7. Emergency Feedwater Actuation Signal SG #2 (EFAS-2)		
a. Steam Generator Level - Low	1,2,3	$\geq 20\%$
b. SG Pressure Difference - High		≤ 140 psid
c. Steam Generator Pressure - Low (c)		≥ 729 psia

(a) Automatic SIAS also initiates a Containment Cooling Actuation Signal (CCAS).

(b) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia decreasing. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

(c) The setpoint may be decreased as steam pressure is reduced, provided the margin between steam pressure and the setpoint is maintained ≤ 200 psi. The setpoint shall be automatically increased to the normal setpoint as steam pressure is increased.

(d) The Main Steam Isolation Signal Function (Steam Generator Pressure - Low) is not required to be OPERABLE when all associated valves isolated by the MSIS Function are closed and de-activated.

(e) Automatic SIAS is required for Containment Spray Actuation Signal (CSAS).

Attachment B

**Existing Technical Specification Pages
San Onofre Nuclear Generating Station
Unit 3**

Table 3.3.1-1 (page 1 of 2)
Reactor Protective System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Linear Power Level - High	1,2	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7 SR 3.3.1.8 SR 3.3.1.9 SR 3.3.1.13	≤ 111.0% RTP
2. Logarithmic Power Level - High ^(a)	2 ^(b)	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≤ .93% RTP
3. Pressurizer Pressure - High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 2385 psia
4. Pressurizer Pressure - Low ^(c)	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≥ 1700 psia
5. Containment Pressure - High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 3.4 psig
6. Steam Generator 1 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 729 psia
7. Steam Generator 2 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 729 psia

(continued)

(a) Trip must be enabled when logarithmic power is $\leq 4E-5\%$ RTP. Trip may be manually bypassed during physics testing pursuant to LCO 3.1.12.

(b) When any RTCB is closed.

(c) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

*PCN500

Table 3.3.5-1 (page 1 of 1)
Engineered Safety Features Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	ALLOWABLE VALUE
1. Safety Injection Actuation Signal(a)		
a. Containment Pressure - High	1,2,3	≤ 3.7 psig
b. Pressurizer Pressure - Low ^(b)		≥ 1700 psia
2. Containment Spray Actuation Signal ^(e)		
a. Containment Pressure - High-High	1,2,3	≤ 15.0 psig
3. Containment Isolation Actuation Signal		
a. Containment Pressure - High	1,2,3	≤ 3.7 psig
4. Main Steam Isolation Signal		
a. Steam Generator Pressure - Low ^(c)	1,2 ^(d) , 3 ^(d)	≥ 729 psia
5. Recirculation Actuation Signal		
a. Refueling Water Storage Tank Level - Low	1,2,3,4	$19.27\% \geq \text{tap span} \geq 17.73\%$
6. Emergency Feedwater Actuation Signal SG #1 (EFAS-1)		
a. Steam Generator Level - Low	1,2,3	$\geq 20\%$
b. SG Pressure Difference - High		≤ 140 psid
c. Steam Generator Pressure - Low(c)		≥ 729 psia
7. Emergency Feedwater Actuation Signal SG #2 (EFAS-2)		
a. Steam Generator Level - Low	1,2,3	$\geq 20\%$
b. SG Pressure Difference - High		≤ 140 psid
c. Steam Generator Pressure - Low (c)		≥ 729 psia

(a) Automatic SIAS also initiates a Containment Cooling Actuation Signal (CCAS).

(b) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia decreasing. Bypass shall be automatically removed before pressurizer exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

(c) The setpoint may be decreased as steam pressure is reduced, provided the margin between steam pressure and the setpoint is maintained ≤ 200 psi. The setpoint shall be automatically increased to the normal setpoint as steam pressure is increased.

(d) The Main Steam Isolation Signal Function (Steam Generator Pressure - Low) is not required to be OPERABLE when all associated valves isolated by the MSIS Function are closed and de-activated.

(e) Automatic SIAS is required for Containment Spray Actuation Signal (CSAS).

Attachment C

**Proposed Technical Specification Changes (mark-up)
San Onofre Nuclear Generating Station
Unit 2**

Table 3.3.1-1 (page 1 of 2)
Reactor Protective System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Linear Power Level – High	1,2	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7 SR 3.3.1.8 SR 3.3.1.9 SR 3.3.1.13	≤ 111.0% RTP
2. Logarithmic Power Level – High ^(a)	2 ^(b)	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≤ .93% RTP
3. Pressurizer Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 2385 psia
4. Pressurizer Pressure – Low ^(c)	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≥ 1700 psia
5. Containment Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 3.4 psig
6. Steam Generator 1 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 717 29 psia
7. Steam Generator 2 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 717 29 psia

(continued)

- (a) Trip must be enabled when logarithmic power is < 4E-5% RTP. Trip may be manually bypassed during physics testing pursuant to LCO 3.1.12.
- (b) When any RTCB is closed.
- (c) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

Table 3.3.5-1 (page 1 of 1)
Engineered Safety Features Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	ALLOWABLE VALUE
1. Safety Injection Actuation Signal(a)		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
b. Pressurizer Pressure – Low ^(b)		≥ 1700 psia
2. Containment Spray Actuation Signal(e)		
a. Containment Pressure – High-High	1,2,3	≤ 15.0 psig
3. Containment Isolation Actuation Signal		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
4. Main Steam Isolation Signal		
a. Steam Generator Pressure – Low ^(c)	1,2 ^(d) , 3 ^(d)	≥ 717 29 psia
5. Recirculation Actuation Signal		
a. Refueling Water Storage Tank Level – Low	1,2,3,4	19.27% ≥ tap span ≥ 17.73%
6. Emergency Feedwater Actuation Signal SG #1 (EFAS-1)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low(c)		≥ 717 29 psia
7. Emergency Feedwater Actuation Signal SG #2 (EFAS-2)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low (c)		≥ 717 29 psia

- (a) Automatic SIAS also initiates a Containment Cooling Actuation Signal (CCAS).
- (b) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia decreasing. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).
- (c) The setpoint may be decreased as steam pressure is reduced, provided the margin between steam pressure and the setpoint is maintained ≤ 200 psi. The setpoint shall be automatically increased to the normal setpoint as steam pressure is increased.
- (d) The Main Steam Isolation Signal Function (Steam Generator Pressure – Low) is not required to be OPERABLE when all associated valves isolated by the MSIS Function are closed and de-activated.
- (e) Automatic SIAS is required for Containment Spray Actuation Signal (CSAS).

Attachment D

**Proposed Technical Specification Changes (mark-up)
San Onofre Nuclear Generating Station
Unit 3**

Table 3.3.1-1 (page 1 of 2)
Reactor Protective System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Linear Power Level – High	1,2	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7 SR 3.3.1.8 SR 3.3.1.9 SR 3.3.1.13	≤ 111.0% RTP
2. Logarithmic Power Level – High ^(a)	2 ^(b)	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≤ .93% RTP
3. Pressurizer Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 2385 psia
4. Pressurizer Pressure – Low ^(c)	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≥ 1700 psia
5. Containment Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 3.4 psig
6. Steam Generator 1 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 71729 psia
7. Steam Generator 2 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 71729 psia

(continued)

(a) Trip must be enabled when logarithmic power is $\leq 4E-5\%$ RTP. Trip may be manually bypassed during physics testing pursuant to LCO 3.1.12.

(b) When any RTCB is closed.

(c) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

*PCN500

Table 3.3.5-1 (page 1 of 1)
Engineered Safety Features Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	ALLOWABLE VALUE
1. Safety Injection Actuation Signal(a)		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
b. Pressurizer Pressure – Low(b)		≥ 1700 psia
2. Containment Spray Actuation Signal(e)		
a. Containment Pressure – High-High	1,2,3	≤ 15.0 psig
3. Containment Isolation Actuation Signal		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
4. Main Steam Isolation Signal		
a. Steam Generator Pressure – Low(c)	1,2(d),3(d)	≥ 717 ⁷²⁹ psia
5. Recirculation Actuation Signal		
a. Refueling Water Storage Tank Level – Low	1,2,3,4	19.27% ≥ tap span ≥ 17.73%
6. Emergency Feedwater Actuation Signal SG #1 (EFAS-1)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low(c)		≥ 717 ⁷²⁹ psia
7. Emergency Feedwater Actuation Signal SG #2 (EFAS-2)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low (c)		≥ 717 ⁷²⁹ psia

- (a) Automatic SIAS also initiates a Containment Cooling Actuation Signal (CCAS).
- (b) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia decreasing. Bypass shall be automatically removed before pressurizer exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).
- (c) The setpoint may be decreased as steam pressure is reduced, provided the margin between steam pressure and the setpoint is maintained ≤ 200 psi. The setpoint shall be automatically increased to the normal setpoint as steam pressure is increased.
- (d) The Main Steam Isolation Signal Function (Steam Generator Pressure – Low) is not required to be OPERABLE when all associated valves isolated by the MSIS Function are closed and de-activated.
- (e) Automatic SIAS is required for Containment Spray Actuation Signal (CSAS).

Attachment E

**Proposed Technical Specification Pages (retyped)
San Onofre Nuclear Generating Station
Unit 2**

Table 3.3.1-1 (page 1 of 2)
Reactor Protective System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Linear Power Level – High	1,2	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7 SR 3.3.1.8 SR 3.3.1.9 SR 3.3.1.13	≤ 111.0% RTP
2. Logarithmic Power Level – High ^(a)	2 ^(b)	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≤ .93% RTP
3. Pressurizer Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 2385 psia
4. Pressurizer Pressure – Low ^(c)	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≥ 1700 psia
5. Containment Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 3.4 psig
6. Steam Generator 1 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 717 psia
7. Steam Generator 2 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 717 psia

(continued)

- (a) Trip must be enabled when logarithmic power is < 4E-5% RTP. Trip may be manually bypassed during physics testing pursuant to LCO 3.1.12.
- (b) When any RTCB is closed.
- (c) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

Table 3.3.5-1 (page 1 of 1)
Engineered Safety Features Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	ALLOWABLE VALUE
1. Safety Injection Actuation Signal(a)		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
b. Pressurizer Pressure – Low ^(b)		≥ 1700 psia
2. Containment Spray Actuation Signal(e)		
a. Containment Pressure – High-High	1,2,3	≤ 15.0 psig
3. Containment Isolation Actuation Signal		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
4. Main Steam Isolation Signal		
a. Steam Generator Pressure – Low ^(c)	1,2 ^(d) , 3 ^(d)	≥ 717 psia
5. Recirculation Actuation Signal		
a. Refueling Water Storage Tank Level – Low	1,2,3,4	19.27% ≥ tap span ≥ 17.73%
6. Emergency Feedwater Actuation Signal SG #1 (EFAS-1)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low(c)		≥ 717 psia
7. Emergency Feedwater Actuation Signal SG #2 (EFAS-2)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low (c)		≥ 717 psia

- (a) Automatic SIAS also initiates a Containment Cooling Actuation Signal (CCAS).
- (b) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia decreasing. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).
- (c) The setpoint may be decreased as steam pressure is reduced, provided the margin between steam pressure and the setpoint is maintained ≤ 200 psi. The setpoint shall be automatically increased to the normal setpoint as steam pressure is increased.
- (d) The Main Steam Isolation Signal Function (Steam Generator Pressure – Low) is not required to be OPERABLE when all associated valves isolated by the MSIS Function are closed and de-activated.
- (e) Automatic SIAS is required for Containment Spray Actuation Signal (CSAS).

Attachment F

**Proposed Technical Specification Pages (retyped)
San Onofre Nuclear Generating Station
Unit 3**

Table 3.3.1-1 (page 1 of 2)
Reactor Protective System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Linear Power Level – High	1,2	SR 3.3.1.1 SR 3.3.1.4 SR 3.3.1.6 SR 3.3.1.7 SR 3.3.1.8 SR 3.3.1.9 SR 3.3.1.13	≤ 111.0% RTP
2. Logarithmic Power Level – High ^(a)	2 ^(b)	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≤ .93% RTP
3. Pressurizer Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 2385 psia
4. Pressurizer Pressure – Low ^(c)	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.12 SR 3.3.1.13	≥ 1700 psia
5. Containment Pressure – High	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≤ 3.4 psig
6. Steam Generator 1 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 717 psia
7. Steam Generator 2 Pressure-Low	1,2	SR 3.3.1.1 SR 3.3.1.7 SR 3.3.1.9 SR 3.3.1.13	≥ 717 psia

(continued)

(a) Trip must be enabled when logarithmic power is ≤ 4E-5% RTP. Trip may be manually bypassed during physics testing pursuant to LCO 3.1.12.

(b) When any RTCB is closed.

(c) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia. Bypass shall be automatically removed before pressurizer pressure exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).

*PCN500

Table 3.3.5-1 (page 1 of 1)
Engineered Safety Features Actuation System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	ALLOWABLE VALUE
1. Safety Injection Actuation Signal(a)		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
b. Pressurizer Pressure – Low ^(b)		≥ 1700 psia
2. Containment Spray Actuation Signal(e)		
a. Containment Pressure – High-High	1,2,3	≤ 15.0 psig
3. Containment Isolation Actuation Signal		
a. Containment Pressure – High	1,2,3	≤ 3.7 psig
4. Main Steam Isolation Signal		
a. Steam Generator Pressure – Low ^(c)	1,2 ^(d) , 3 ^(d)	≥ 717 psia
5. Recirculation Actuation Signal		
a. Refueling Water Storage Tank Level – Low	1,2,3,4	19.27% ≥ tap span ≥ 17.73%
6. Emergency Feedwater Actuation Signal SG #1 (EFAS-1)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low(c)		≥ 717 psia
7. Emergency Feedwater Actuation Signal SG #2 (EFAS-2)		
a. Steam Generator Level – Low	1,2,3	≥ 20%
b. SG Pressure Difference – High		≤ 140 psid
c. Steam Generator Pressure – Low (c)		≥ 717 psia

- (a) Automatic SIAS also initiates a Containment Cooling Actuation Signal (CCAS).
- (b) The setpoint may be decreased to a minimum value of 300 psia, as pressurizer pressure is reduced, provided the margin between pressurizer pressure and the setpoint is maintained ≤ 400 psia. Trips may be bypassed when pressurizer pressure is < 400 psia decreasing. Bypass shall be automatically removed before pressurizer exceeds 500 psia (the corresponding bistable allowable value is ≤ 472 psia).
- (c) The setpoint may be decreased as steam pressure is reduced, provided the margin between steam pressure and the setpoint is maintained ≤ 200 psi. The setpoint shall be automatically increased to the normal setpoint as steam pressure is increased.
- (d) The Main Steam Isolation Signal Function (Steam Generator Pressure – Low) is not required to be OPERABLE when all associated valves isolated by the MSIS Function are closed and de-activated.
- (e) Automatic SIAS is required for Containment Spray Actuation Signal (CSAS).

Attachment H

**Affidavit supporting withholding Attachment G from public
disclosure**



Westinghouse Electric Company
Nuclear Services
P.O. Box 500
Windsor, Connecticut 06095-0500
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

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Direct fax: 860-731-6238
e-mail: ian.c.rickard@us.westinghouse.com

Our ref: CAW-03-1652

May 29, 2003

**APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE**

Subject: Calculation Number CE NPSD-570-P, Rev 07, "SONGS Units 2 & 3, Plant Protection System Setpoint Calculation," dated September 1996 (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-03-1652 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses the considerations listed in paragraph (b)(4) of 10 CFR Section 2.790 of the Commission's regulations. It is respectfully requested that the information, which is proprietary to Westinghouse, be withheld from public disclosure in accordance with 10 CFR 2.790 of the Commission's regulations.

Accordingly, this letter authorizes use of the accompanying affidavit by Southern California Edison.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-03-1652 and should be addressed to the undersigned.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Ian C. Rickard', written over a horizontal line.

Ian C. Rickard, Licensing Project Manager
Regulatory Compliance and Plant Licensing

Enclosure:

bcc: M. Wade (RSM, SONGS)
H. A. Sepp (ECE 4-7A)
C. B. Brinkman (Rockville, MD)
RCPL Administrative Aide (ECE 4-7A)

AFFIDAVIT

STATE OF CONNECTICUT)

) ss: WINDSOR

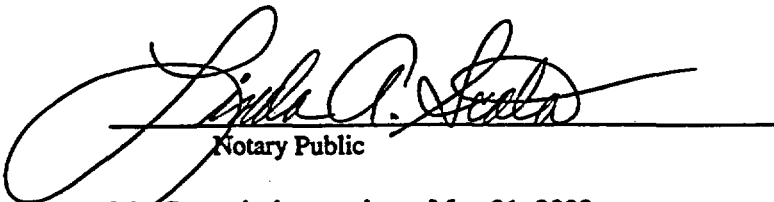
COUNTY OF HARTFORD)

Before me, the undersigned authority, personally appeared Ian C. Rickard, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC ("Westinghouse"), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:



Ian C. Rickard, Licensing Project Manager
Regulatory Compliance and Plant Licensing

Sworn to and subscribed before me
this 29th day of May 2003


Notary Public

My Commission expires: May 31, 2008

- (1) I am the Licensing Project Manager, Regulatory Compliance and Plant Licensing, in Nuclear Services of Westinghouse Electric Company LLC ("Westinghouse"), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of the Westinghouse Electric Company LLC.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by the Westinghouse Electric Company LLC in designating information as a trade secret, privileged or as confidential commercial or financial information.
- (4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.
 - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
 - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

- (a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.
- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- (c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.

- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system, which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
 - (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
 - (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.
 - (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
 - (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
 - (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.790, it is to be received in confidence by the Commission.
 - (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
 - (v) The proprietary information sought to be withheld in this submittal is that which is contained in calculation number CE NPSD-570-P, "SONGS, Units 2 & 3, Plant Protection System Setpoint Calculation" (Proprietary), dated September 1996. This calculation is being transmitted by Southern California Edison Company letter and Application for Withholding Proprietary Information from Public Disclosure to the Document Control Desk.

This information is part of that which will enable Westinghouse to:

- (a) Combine equipment uncertainties with the safety analysis to produce trip setpoints for SONGS 2 & 3.
- (b) Establish allowable values for SONGS 2 & 3 Technical Specifications.
- (c) Determine response times for the SONGS 2 & 3 reactor protective system and the engineered safety features actuation system.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for purposes of establishing plant protective system setpoints.
- (b) Westinghouse can sell support and defense of such setpoint analyses.
- (c) The information requested to be withheld reveals the distinguishing aspects of a methodology, which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents to be furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information that is proprietary is contained within calculation CE NPSD-570-P. The justification for claiming the information as proprietary is indicated in the associated Affidavit, and is consistent with the types of information Westinghouse customarily holds in confidence as identified in the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

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