

BEFORE THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Application of SOUTHERN CALIFORNIA EDISON )  
COMPANY and SAN DIEGO GAS & ELECTRIC COMPANY )  
for a Class 104(b) License to Acquire, ) DOCKET NO. 50-206  
Possess, and Use a Utilization Facility as )  
Part of Unit No. 1 of the San Onofre Nuclear ) Amendment No. 151  
Generating Station )

SOUTHERN CALIFORNIA EDISON COMPANY and SAN DIEGO GAS & ELECTRIC  
COMPANY, pursuant to 10 CFR 50.90, hereby submit Amendment Application No. 151.

This amendment consists of Proposed Change No. 169 to Provisional  
Operating License No. DPR-13. Proposed Change No. 169 modifies the Technical  
Specifications incorporated in Provisional Operating License No. DPR-13 as  
Appendix A.

Proposed Change No. 169 is a request to revise Technical Specification 3.5.2,  
"Control Group Insertion Limits" to preclude the insertion of Control Group 1  
during plant operation. This revision will allow for future core design,  
consistent with the revised limits, that stretches fuel cycle length and  
lowers neutron leakage.

In the event of conflict, the information in Amendment Application  
No. 151 supersedes the information previously submitted.

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Based on the significant hazards analysis provided in the Description of Proposed Change and Significant Hazards Analysis of Proposed Change No. 169, it is concluded that (1) the proposed change does not involve a significant hazards consideration as defined in 10 CFR 50.92, and (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change.

Pursuant to 10 CFR 170.12, the fee of \$150 is herewith remitted.

Subscribed on this 26<sup>th</sup> day of May, 1988.

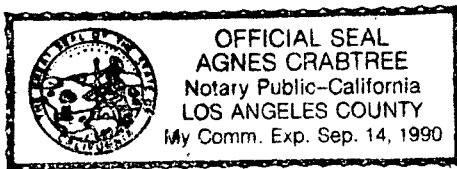
Respectfully submitted,

SOUTHERN CALIFORNIA EDISON COMPANY

By: *Kenneth P. Baskin*  
Kenneth P. Baskin  
Vice President

Subscribed and sworn to before me this  
26<sup>th</sup> day of May, 1988.

*Agnes Crabtree*  
Notary Public in and for the County of  
Los Angeles, State of California



Charles R. Kocher  
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Attorneys for Southern  
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By: *James A. Beoletto*  
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Subscribed on this 18 day of MAY, 1988.

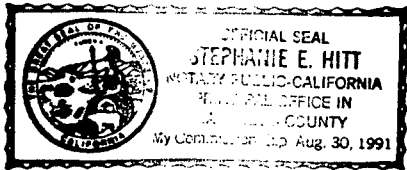
Respectfully submitted,  
SAN DIEGO GAS & ELECTRIC COMPANY

By: [Signature]  
Vice President

Subscribed and sworn to before me this  
18 day of May.



Stephanie E. Hitt  
Notary Public in and for the County of  
San Diego, State of California



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By: [Signature]  
David R. Pigott

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of SOUTHERN )  
CALIFORNIA EDISON COMPANY )  
and SAN DIEGO GAS & ELECTRIC )  
COMPANY (San Onofre Nuclear )  
Generating Station Unit No. 1 )

Docket No. 50-206

CERTIFICATE OF SERVICE

I hereby certify that a copy of Amendment Application No. 151 was served on the following by deposit in the United States Mail, postage prepaid, on the 26th day of May, 1988.

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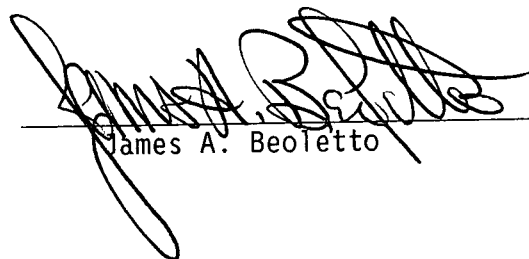
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James A. Beoletto

DESCRIPTION AND SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS OF  
PROPOSED CHANGE NO. 169 TO THE TECHNICAL SPECIFICATIONS  
PROVISIONAL OPERATING LICENSE NO. DPR-13

This is a request to revise Section 3.5.2, "CONTROL GROUP INSERTION LIMITS" of Appendix A Technical Specifications for San Onofre Nuclear Generating Station, Unit 1 (SONGS 1).

DESCRIPTION OF CHANGE

Technical Specification 3.5.2 addresses the restrictions for control group insertion to ensure that certain safety analyses assumptions are not exceeded. Operation of the reactor with the specified control groups at or above the insertion limits defined in Figure 3.5.2.1 will ensure 1) an acceptable core power distribution during power operation, 2) a limit on potential reactivity insertions for a hypothetical control rod ejection, and 3) reactor subcriticality after a reactor trip.

Proposed Change No. 169 proposes to revise 3.5.2 to allow no insertion for the Shutdown Groups or Control Group 1, and to incorporate Standard Technical Specification (STS) type of format and action statements. The inclusion of the shutdown groups in the scope of 3.5.2 represents the formal restriction of plant operation in a manner that was previously administratively controlled. This change will assure operation consistent with core design analysis and represents no change in the way in which the plant is operated. There is not a need to include specific STS type of action statements for the shutdown groups, as the existing provisions of Technical Specification 3.5.3 remain applicable. The change to Figure 3.5.2.1 will allow the current rod insertion limit for Control Group 2, but insertion of Control Group 1 will no longer be allowed. Consequently, Control Group 1 will essentially function as a shutdown group. Additionally, Figure 3.5.2.1 is revised to be in terms of 0-320 Steps, in lieu of the current convention of 0-100%, and to include the previously administratively controlled 21-step uncertainty inherent in the rod control system, but these revisions represent no change to the allowed insertion limits for Control Group 2. The balance of 3.5.2 remains consistent with the current specification.

EXISTING TECHNICAL SPECIFICATION

See Attachment 1

PROPOSED TECHNICAL SPECIFICATION

See Attachment 2

## SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

As required by 10 CFR 50.91(a)(1), this analysis is provided to demonstrate that a proposed license amendment to implement a revised control rod group insertion limit for San Onofre Nuclear Generating Station, Unit 1 (SONGS 1) represents a no significant hazards consideration. In accordance with the three factor test of 10 CFR 50.92(c), implementation of the proposed license amendment was analyzed using the following standards and found not to:

- 1) involve a significant increase in the probability or consequences for an accident previously evaluated; or
- 2) create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3) involve a significant reduction in a margin of safety.

### Analysis

Operation with Control Group 1 in the fully withdrawn position is allowed by the current specification and is the current SONGS 1 operating practice. Accordingly, the revision to Figure 3.5.2.1 does not revise or reduce any margins in the safety analyses. The additional restriction on Control Group 1 insertion limits has the effect of decreasing the peaking factor seen in the worst case main steam line break and ejected rod accident safety analyses. Future reload evaluations for SONGS 1 may take advantage of the additional restriction of Control Group 1 insertion limits, with the anticipated result of longer cycle length and adoption of low neutron leakage loading patterns, but at no time would the design basis fuel design limits, described in the bases to 3.5.2, be exceeded. Therefore, this change is merely necessary to provide assurance that a fuel operation design assumption, that will be used in future core designs, is maintained through the life of that core of fuel.

The adoption of the STS type of format and action statements for 3.5.2 merely allows for specific actions in lieu of the general LCO actions of Specification 3.0.3. The limited amount of time that the control group insertion limits are allowed to be exceeded (i.e., 2 hours) is sufficient time for the situation to be corrected, but a short enough time period so as not to violate the safety analyses assumptions.

Conformance of the proposed changes to the standards for a determination of no significant hazard as defined in 10 CFR 50.92 (three factor test) is shown in the following:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

Operation of the facility in accordance with this proposed change is allowed by the current technical specifications. The change will only modify the rod position assumptions for future core reloads of the current spectrum of analyzed accidents. The proposed change



serves to create a restriction that assures operation with Control Group 1 fully withdrawn. Accordingly, there are no changes to the probability or consequences of any previously analyzed accidents involving rod movement. The revision to the format and bases to allow action time to restore the control group to its insertion limit is consistent with STS requirements and does not involve a significant increase in any accident probability. Therefore, it is concluded that operation of the facility in accordance with this proposed change will not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

Operation of the facility in accordance with the control group insertion limit described in this proposed change is allowed by the current specifications. The operation of the facility in accordance with this change is bounded by the existing accident analyses and future core reloads will be bounded by the same analyses. These analyses assume dropped rod worth consistent with the control group and shutdown group rod design and, since this design does not change, only the assumed position changes, there is not the creation of any new or different accidents. The remaining changes are administrative in nature and do not affect previously analyzed accidents or create any new accidents. Therefore, it is concluded that operation of the facility in accordance with this proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in a margin of safety?

Response: No

Operation of the facility in accordance with this proposed change involves an additional operating restriction that will increase the current design margin of safety in the main steamline break and ejected rod analyses. The increase in safety margin will be seen in the calculated peaking factors for these two accident scenarios. It is planned that future core reloads may take advantage of the additional margin to extend cycle life, but at no time would the design safety margin, as described in the basis of 3.5.2, be exceeded. The remaining changes are administrative in nature and do not impact any margin of safety. Therefore, it is concluded that operation of the facility in accordance with this proposed change does not involve a significant reduction in a margin of safety.

SAFETY AND SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

Based on the preceding analysis, it is concluded that: (1) Proposed Change No. 169 does not involve a significant hazards consideration as defined by 10 CFR 50.92; and (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed change.

Attachment 1 - Existing Specifications  
Attachment 2 - Proposed Specifications

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EXISTING TECHNICAL SPECIFICATION