OCT 15 1984

MEMORANDUM FOR: James R. Miller, Chief
Operating Reactors Branch No. 3
Division of Licensing

FROM: George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

SUBJECT: REQUEST FOR PUBLICATION IN MONTHLY FR NOTICE - NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES AND PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION AND OPPORTUNITY FOR A HEARING

Southern California Edison Company, et al, Docket Nos. 50-361 and 50-362, San Onofre Nuclear Generating Station, Units 2 and 3, San Diego County, California

Date of amendment request: April 10, August 1, and August 7, 1984 (PCN-138)

Description of amendment request: The proposed amendments would change Technical Specification 3.1.3, "Movable Control Element Assemblies." This Technical Specification requires that (1) acceptable power distribution limits are maintained, (2) the minimum shutdown margin is maintained, and (3) the potential effects of CEA misalignment are limited to acceptable levels. Technical Specification 3.1.3.1 requires that all full length and part length Control Element Assemblies (CEAs) be moveable and operable and specifies the maximum allowed deviation in the position of a single CEA from any other CEA within its group. Technical Specification 3.1.3.7 specifies insertion position limits and insertion time limits for part length CEA's.

The requirements of these specifications are implemented by the Core Protection Calculator (CPC) and Control Element Assembly Calculator (CEAC) software which applies penalty factors in the calculation of Departure from Nucleate Boiling Ratio (DNBR) and Linear Heat Rate (LHR) upon detection of a CEA position deviation.

The proposed change consists of three parts as follows:

a. The proposed change revises Technical Specifications 3.1.3.1 to require a reduction in core power after the detection of a CEA deviation (i.e. one CEA is inserted 19 or more inches further than the other CEA's in its group) rather than the application of penalty factors in the calculation of DNBR and LHR as required by the existing Technical Specification. Application of the existing penalty factors in the CPC/CEAC software will typically result in a reactor trip when a CEA deviation occurs. The proposed elimination of penalty factors will result in power reduction but may prevent spurious reactor trips due to electrical noise.

b. In the existing Technical Specification 3.1.3.6, the regulating CEA insertion limits and withdrawal sequence are independent of whether the Core Operating Limit Supervisory System (COLSS) is in-

service or out of service. The proposed change would require that the regulating CEA groups be limited to the withdrawal sequence and to the insertion limits shown in the existing Figure 3.1-2 when COLSS is in service and to the Short Term Steady State Insertion Limits when COLSS is out of service. A new section is added to this Technical Specification to provide an action statement applicable when COLSS is out of service. The proposed action statement would require that when COLSS is out of service and the regulating CEA groups are inserted beyond the Short Term Steady State Insertion Limit, (except for surveillance testing pursuant to Specification 4.1.3.1.2) that within two hours the regulating CEA group must be restored to its limit or thermal power must be reduced to less than or equal to that fraction of power which is allowed by the CEA group position and the Short Term Steady State Insertion Limit.

These changes would provide assurance that the plant is operated within the fuel design limits and that the operators are required to compensate for the removal of inward CEA deviation penalty factors.

c. The existing Technical Specification 3.1.3.7 does not limit part length CEA position. The proposed change would restrict part length CEA positions to the core power dependent insertion limits, as indicated in the new Figure 3.1-3. This change is required to compensate for the reduction of the part length CEA deviation penalty factors in the updated COLSS and CPC software.

Basis for proposed no significant hazards determination: The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples (48 FR 14870) of amendments that are considered not likely to involve significant hazards consideration. Example (vi) relates to a change which either may result in some increase in the probability or consequences or a previously-analyzed accident or may in some way reduce a safety margin, but where the results are clearly within all acceptance criteria with respect to the system or component specified in the Standard Review Plan. Example (ii) relates to a change that constitutes an additional limitation, restriction or control not presently included in the Technical Specifications: for example, a more stringent surveillance requirement.

In this case, the proposed change described in (a) above requires a reduction in core power following an inward CEA deviation event instead of applying penalty factors to the calculation of DNBR and LHR. The proposed modification is similar to Example (vi) in that the change may reduce in some way a margin of safety, but where the results are clearly within all acceptance criteria with respect to the system or component specified in the Standard Review Plan (SPR).

Section 4.3 of the SRP delineates acceptance criteria for reactivity control systems. Specifically, the reactivity control systems must assure with high probability that acceptable fuel design limits are not exceeded during normal operation or anticipated operational occurences. The elimination of penalty factors currently applied to the calculation of DNBR and LHR is compensated for by the reduction in core power following an inward CEA deviation event required by the proposed specification. This will preserve the current level of protection and assure that acceptable fuel design limits are not exceeded.

The proposed change described in (b) above is similar to Example (ii) in that it constitutes an additional limitation, restriction or control not presently included in the Technical Specifications. Specifically, this

change requires additional limitations on the CEA withdrawal sequence and adds an Action Statement applicable to the regulating CEA's when COLSS is out-of-service.

The proposed change described in (c) above is similar to Example (vi) in that it relates to a change which either may result in some increase in the probability or consequence of a previously-analyzed accident or may in some way reduce a safety margin, but where the results are clearly within all acceptance criteria with respect to the system or component specified in the Standard Review Plan. Section 4.3 of the SRP delineates acceptance criteria for reactivity control systems. Specifically, the reactivity control systems must assure with high probability that acceptable fuel design limits are not exceeded during normal operation or anticipated operational occurrences. The elmination of penalty factors applied to the calculation of DNBR and LHR is compensated for by restricting the position of part length CEA's based on core power. This will preserve the current level of protection and assure that acceptable fuel design limits are not exceeded. Therefore, based on the above considerations, the Commission proposes to determine that these changes do not involve a significant hazards consideration.

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Attorney for licensee: Charles R. Kocher, Esq., Southern California Edison Company, 2244 Walnut Grove Avenue, P. O. Box 800, Rosemead, California 91770 and Orrick, Herrington & Sutcliffe, Attn: David R. Pigott, Esq., 600 Montgomery Street, San Francisco, California 94111.

NRC Branch Chief: George W. Knighton

/S/

George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

cc: P. Kruetzer

~~Docket File 50-361/362~~
NRC PDR
L PDR
NSIC
LB#3 Reading
JLee (2)
HRDenton
DGEisenhut
HRood
LChandler

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