



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

UNITED STATES NUCLEAR REGULATORY COMMISSION
SOUTHERN CALIFORNIA EDISON COMPANY, ET AL.

DOCKET NO. 50-206

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT NO. 1
NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO
PROVISIONAL OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Provisional Operating License No. DPR-13, issued to Southern California Edison Company and San Diego Gas and Electric Company (the licensees), for operation of San Onofre Nuclear Generating Station, Unit No. 1, located in San Diego, California. The request for amendment was submitted by letter dated July 3, 1990, as supplemented by letter dated August 22, 1990.

Proposed Change No. 227, which was submitted by Amendment Application No. 185, proposes to change Technical Specification 3.4.3, "Auxiliary Feedwater System," to allow the minimum system flow requirement to be reduced from 125 gpm to 100 gpm. This change is necessary to allow the licensee to replace the auxiliary feedwater system flow venturis during the Cycle 11 refueling outage to limit the maximum auxiliary feedwater flow to each steam generator to 150 gpm for water hammer considerations. Replacing the flow venturis to limit the maximum auxiliary feedwater flow to the steam generators will also reduce the minimum auxiliary feedwater flow capability of the system.

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Prior to issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

As required by 10 CFR 50.91(a), the licensee has provided its analysis about the issue of no significant hazards consideration which is presented below:

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

Response: No

Installation of smaller diameter flow reducing venturis into the three auxiliary feedwater system lines will not impact the probability or consequence of accidents previously evaluated. Calculations were made using the Westinghouse LOFTRAN code to simulate feedline break accidents. The results from these analysis show that the proposed minimum AFW flowrates are sufficient to remove core decay heat. In all cases the core remains covered with water and in a coolable geometry at all times.

The Westinghouse analyses, attachment 3, were performed on the four worst case events reported in the Updated Final Safety Analysis Report (UFSAR), Section 15.6. They are 1) the feedline break upstream of the in-containment check valve (FWLB-U) at 100% power, Case D, 2) the feedline break upstream of the in-containment check valve (FWLB-U) at 50% power, Case E, 3) the feedline break downstream of the in-containment check valve (FWLB-D) at 100% power, Case F, and 4) the feedline break downstream of the in-containment check valve (FWLB-D) at 50% power, Case G.

The events discussed in UFSAR Section 15.5 were not reanalyzed since the resizing of the AFW venturis does not affect AFW performance in these cases. They are the partial loss of normal feedwater at 100% power with

an AFW flow of 165 gpm, (LONF Case A), the complete loss of normal feedwater at 100% power with an AFW flow of 185 gpm (LONF Case B), and the complete loss of normal feedwater at 50% power with and AFW flow of 185 gpm, (LONF Case C). The existing analyses are still valid in these cases since the minimum flow did not change with the modification.

The reanalysis of main feedwater line break events support SONGS 1 operation with the reduced AFW flows of 100 gpm for FWLB-U (Cases D and E) and 175 gpm for FWLB-D (Cases F and G). In all cases, the core remains covered and in coolable geometry at all times. Thus, all applicable acceptance criteria are shown to be met. The radiological consequences following a feedline break, for all cases analyzed are bounded by the radiological consequences as reported in the UFSAR, section 15.6. Therefore, the reduced AFW flows are demonstrated to be acceptable and do not involve a significant increase in the probability or consequences of an accident previously evaluated.

Normal Technical Specification Surveillance testing will verify operability of both Trains of AFW.

Design verification testing will be performed in MODES 5 and 1 in addition to the surveillance testing required by the Technical Specifications. This additional testing of the Auxiliary Feedwater System (AFWS) will be performed to confirm that the AFWS meets the design basis requirements.

Train B pump G-10W and Train A pump G-10S will be tested in MODE 5 to determine cavitating points of the venturis. The testing will also develop sign quality pump curves.

Train B testing will confirm that pump G-10W will not exceed 450 gpm total flow to all three steam generators. This design verification testing, plus the standard construction testing will ensure Train B operates within the design basis.

Train A motor driven Pump G-10S will also be tested to verify it is capable of supplying at least 100 gpm to two intact main feedlines and depressurized steam generators.

MODE 1 is required to allow sufficient steam pressure to run the Turbine AFW pump (G-10), use automatic controls for Main Feedwater and Reactor Rod Control, and maintain stable plant conditions.

In MODE 1, testing will confirm the flowrates for the Turbine AFW pump, G-10 in combination with the motor driven AFW pump G-10S. Actual flow testing will ensure the pumps meet the minimum requirement of 100 gpm total flow to two intact main feedlines and pressurized steam generators and the maximum of 150 gpm flow per steam generator to prevent water hammer. This testing will provide accurate system curves for measurement of flow resistance to the steam Generators and inlet losses at a variety of pressures with accurate flow rates.

SCE calculations and Westinghouse analyses shows that acceptable AFW flow

rates to the steam generators are achieved for all AFWS design basis events. This testing will verify the analyses results. It will not affect the accident probabilities since the purpose of the system is to mitigate an accident. The accident consequences will not be affected in MODE 5 since the AFW system is not required in that MODE and accidents are postulated. During Mode 1 testing, if an accident were to occur, Train B would actuate. If Train B were to fail, Train A would actuate as designed. As discussed in Attachment 4 the minimum AFW flow required at or below 25% power is well below the calculated flow of the Train A pumps G-10 and G-10S. The operation of either Train of AFW at or below 25% power will ensure that all acceptance criteria are met in the event of a feedline break or loss of normal feedwater flow.

Therefore, operating San Onofre Unit 1 in accordance with this proposed change does not involve a significant increase in the probability or consequences of any 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

Resizing the AFW flow reducing venturis to prevent the possibility of a water hammer event has been analyzed, as discussed above. After installation of the new venturis, the AFWS will function as designed.

The flow verification tests will be performed shortly after MODE 1 entry at or below 25% power. If a feed water system design basis accident were to occur before testing pump G-10, AFW Train B would actuate and provide the required AFW flow for the intact steam generators. If Train B fails, Train A AFW pumps G-10 and G-10S would be available to actuate as required. As discussed in part 1 above, the minimum AFW flow required at or below 25% power is well below the calculated flow of the Train A pumps G-10 and G-10S. Operating either Train of AFW at or below 25% power will ensure that all acceptance criteria are met in the event of a feedline break or loss of normal feedwater flow.

Therefore, it is concluded that operation of the facility in accordance with this 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

As discussed above, this proposed modification will resize the AFW venturis to limit maximum AFW to 150 gpm and results in a lower flow to the steam generators in the event of a feedwater line break accident. Analyses has shown there is no significant reduction in any margin of safety, i.e., core decay heat removal is sufficient, the core remains in a coolable state, and is never uncovered.

Testing of Train A in MODE 1 below 25% power will not significantly reduce the margin of safety. In the event of a FWLB-U, AFW Train B is available. In addition, AFW Train A with pumps G-10 and G-10S is also available and capable of delivering the required flows at 25% power. Therefore, the operation of the facility in accordance with this proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the analysis and, based on that review, it appears that the three criteria are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

Written comments may be submitted by mail to the Regulatory Publications Branch, Division of Freedom of Information and Publications Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room P-223, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland, from 7:30 a.m. to 4:15 p.m. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. The filing of requests for hearing and petitions for leave to intervene is discussed below.

By October 10, 1990, the licensees may file a request for a hearing with respect to issuance of the amendment to the subject provisional operating license, and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for hearing and a petition for leave to intervene. Requests for a hearing and petitions for leave to intervene shall be filed in accordance with

the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. 20555 and at the local public document room located at the University of California, Main Library, P.O. Box 19557, Irvine, California 92713. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition, and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR 2.714, a petition for leave to intervene must set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspects(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven, would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission may make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no

significant hazards consideration, the Commission may issue the amendment and make it effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment involves a significant hazards consideration, any hearing held would take place before the issuance of the amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period, such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of issuance and provide the opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

A request for a hearing or a petition for leave to intervene shall be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street N.W., Washington, D.C., by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner promptly so inform the Commission by a toll-free telephone call to Western Union at 1-800-325-6000 (in Missouri 1-800-342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to John T. Larkins: petitioner's name and telephone number; date petition was mailed; plant name; and publication date and page

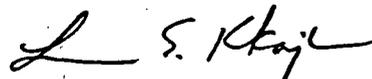
number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to James A. Beoletto, Esq., Southern California Edison Company, P.O. Box 800, Rosemead, California 91770, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board, that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714 (a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated July 3, 1990, as supplemented by letter dated August 22, 1990, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street N.W., Washington, D.C. 20555, and at the Main Library, University of California, P.O. Box 19557, Irvine, California 92713.

Dated at Rockville, Maryland, this 31st day of August, 1990.

FOR THE NUCLEAR REGULATORY COMMISSION



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