

UNITED STATES NUCLEAR REGULATORY COMMISSIONARIZONA PUBLIC SERVICE COMPANY, ET AL.DOCKET NOS. 50-528, 50-529, AND 50-530PALO VERDE NUCLEAR GENERATING STATION, UNIT NOS. 1, 2, AND 3NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO
FACILITY OPERATING LICENSES 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 Facility Operating License Nos. NPF-41, NPF-51, and NPF-74, issued to Arizona Public Service Company, Salt River Project Agricultural Improvement and Power District, El Paso Electric Company, Southern California Edison Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power and Southern California Public Power Authority (licensees), for operation of the Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3 located in Maricopa County, Arizona.

The proposed amendment would revise the technical specifications relating to the minimum required shutdown cooling flowrate. The amendment would reduce the required flowrate from 4000 gpm to 3780 gpm to provide additional margin for preventing air entrainment while the reactor coolant system is partially drained.

Before issuance of the proposed license amendments, 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 requests for amendments involve no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facilities in



accordance with the proposed amendments 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. These three criteria are discussed in detail below, as presented by the licensees:

Standard 1 - Involves a significant increase in the probability or consequences of an accident previously evaluated.

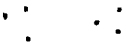
The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated but actually enhances the safety of operation of the shutdown cooling system. Lowering the shutdown cooling flow during reduced reactor coolant system inventory operation improves the margin between the required minimum flow and the formation of vortexes in the shutdown cooling suction nozzles. The formation of these vortexes has the potential of air binding the shutdown cooling heat exchanger and pumps of the operating shutdown cooling train.

The boron dilution event was analyzed by ABB-Combustion Engineering to determine if the new flowrates would provide adequate time for operator recognition and correction prior to criticality. The results are as follows:

"The limiting (most rapid) case which was analyzed for PVNGS was the case of a dilution during Beginning of Core (BOC), Mode 5 drained conditions, at the maximum charging flow rate. Based upon the RCS volume which was assumed (including one train of SDCS) at these conditions, and the time associated with circulation of the RCS at an actual flow of 3400 gpm, the analysis shows that the mixing time is short relative to the time to criticality therefore the dilution would proceed smoothly. It is concluded that there will be sufficient time to recognize and control the dilution before the core reached critical. The case of Mode 5, RCS not drained (with all other conditions the same) and Mode 6 cases are bounded by the limiting case of drained conditions in Mode 5. Therefore a shutdown cooling system flowrate of 3400 gpm is acceptable in Modes 5 and 6 with respect to a postulated boron dilution event. This evaluation has completed verification according to the C-E [Quality Assurance Design Manual]."

Standard 2 - Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed reduced shutdown cooling flow changes the allowable flow to a value which does not affect the capability to detect and take corrective action for a boron dilution incident while on shutdown cooling. The



ability of the shutdown cooling system to remove decay heat and maintain RCS temperature is controlled by operators who vary flow through the shutdown cooling heat exchanger to maintain the specified mode temperature requirements. The proposed minimum flow decreases the possibility of air binding the shutdown cooling system when at mid-loop by minimizing operation with flowrates which could induce significant air entrainment in the shutdown cooling system. The reduced flow does not affect operation of the shutdown cooling system nor involve any system configuration changes. Thus no possibility of a new or different kind of accident from any accident previously evaluated is created.

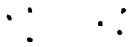
Standard 3 - Involve a significant reduction in a margin of safety.

The reduction in the minimum flow requirements does not reduce the margin of safety associated with the operation of the shutdown cooling system. The system will still perform within its design bases. The proposed flow will increase the margin of safety by allowing operation of the system further away from the flowrates which produce significant air entrainment in the shutdown cooling system. This minimizes the possibility of rendering one train of shutdown cooling inoperable due to air binding of the pumps or heat exchanger.

The proposed change matches one of the examples given in 51 FR 7751 of amendments that do not involve a significant hazards consideration. Specifically, the proposed amendment is a change resulting from the application of a small refinement of a previously used calculational model or design method. In this case, the lower minimum flow requirements were the result of a reanalysis of the boron dilution event by ABB-Combustion Engineering. This reanalysis demonstrated the proposed minimum flowrates presented in this amendment request meet the requirements of the original analysis.

Therefore, based on the above considerations, the Commission has made a proposed determination that the requests for amendment involve 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.



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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 January 22, 1991, the licensees may file a request for a hearing with respect to issuance of the amendment to the subject facility 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 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 Phoenix Public Library, 12 East McDowell Road, Phoenix, Arizona 85004.

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 shall 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 aspect(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 will 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 requests involve no significant hazards consideration, the Commission may issue the amendments and make them effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendments.

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

Normally, the Commission will not issue the amendments 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 amendments before the expiration of the 30-day notice period, provided that its



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final determination is that the amendments involve 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 James E. Dyer: 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 Arthur C. Gehr, Esq., Snell and Wilmer, 3100 Valley Center, Phoenix, Arizona 85073, 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



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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 November 20, 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 local public document room, Phoenix Public Library, 12 East McDowell Road, Phoenix, Arizona 85004.

Dated at Rockville, Maryland this 12th day of December 1990.

FOR THE NUCLEAR REGULATORY COMMISSION

Charles M. Trammell

Charles M. Trammell, Senior Project Manager
Project Directorate V
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation



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