



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 18 TO FACILITY OPERATING LICENSE NO. NPF-41

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

PALO VERDE NUCLEAR GENERATING STATION, UNIT NO. 1

DOCKET NO. STN 50-528

1.0 INTRODUCTION

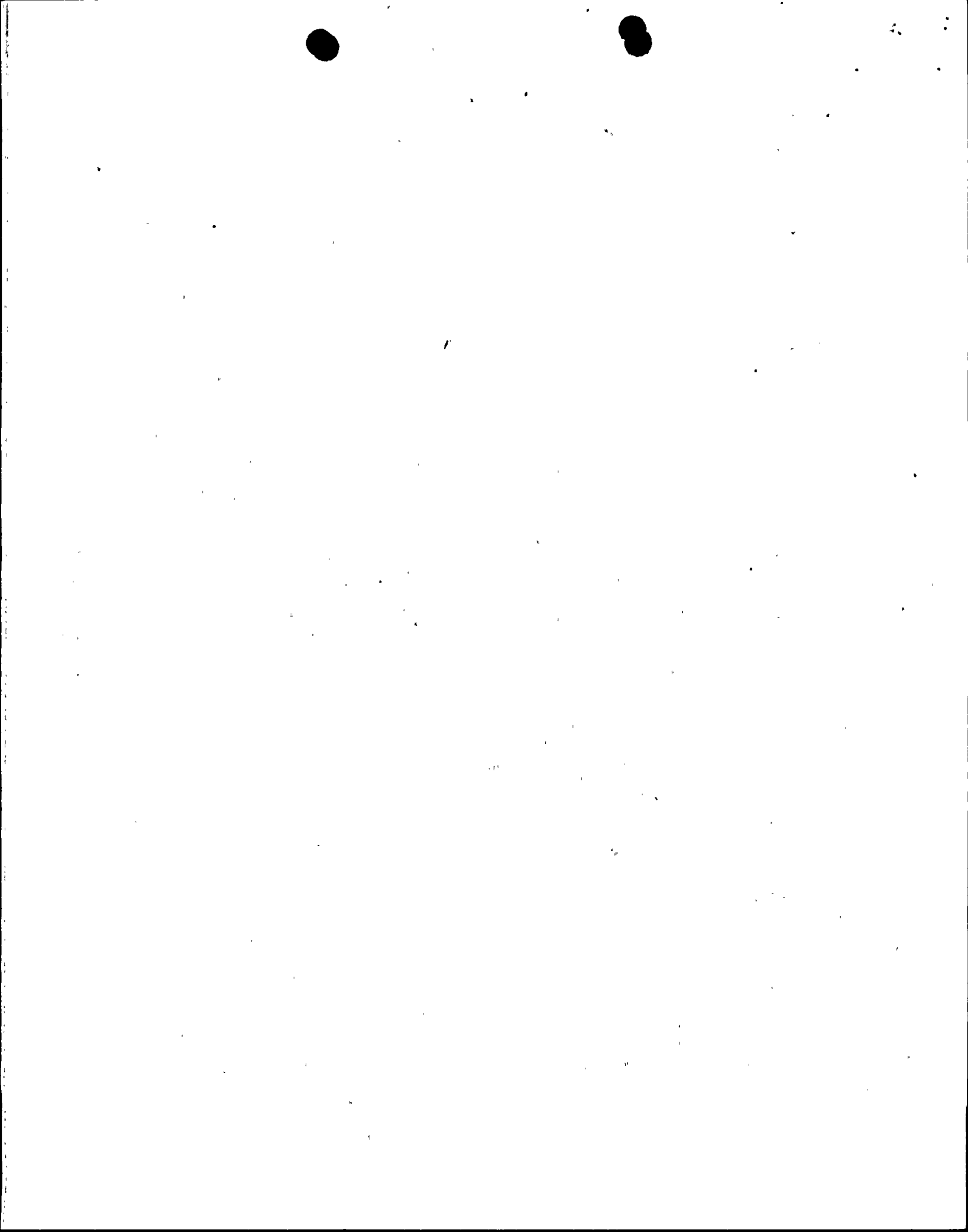
By letter dated May 10, 1987, as supplemented by letter dated May 14, 1987, the Arizona Public Service Company (APS) on behalf of itself, the Salt River Project Agricultural Improvement and Power District, Southern California Edison Company, El Paso Electric Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority (licensees), requested a change to the Technical Specifications (Appendix A to Facility Operating License NPF-41) for the Palo Verde Nuclear Generating Station, Unit 1. The proposed change would revise Technical Specification 3/4.11.1, on a one time basis and for a period not to exceed March 31, 1988, to allow the release to the onsite evaporation pond of secondary system liquid waste with radioactive concentrations of Antimony-124 in excess of 5×10^7 $\mu\text{Ci/ml}$, provided that 10 CFR Part 20 limits are not exceeded.

2.0 DISCUSSION

Palo Verde Unit 1 returned to power operation during March 1987 following an outage to repair a Steam Generator (S/G) tube leak and to plug S/G tubes which had exhibited wear. After resumption of power, it was determined that the required cleanup activities of the secondary system, due to the primary to secondary leakage which occurred in January 1987, could not be completed during power operation without exceeding the Limiting Condition for Operation (LCO) for Specification 3/4.11.1, "Secondary System Liquid Waste Discharges to Onsite Evaporation Ponds."

Specification 3/4.11.1 states that, "the concentration of radioactive material discharged from secondary system liquid waste to the onsite evaporation ponds shall be limited to the lower limit of detectability (LLD) defined as 5×10^7 $\mu\text{Ci/ml}$ for the principal gamma emitters or 1×10^6 $\mu\text{Ci/ml}$ for I-131." The concentrations of radionuclides in the ponds are estimated to be much less than that of the secondary system liquid wastes since there are other sources of water without radionuclides entering the pond. This specification is provided to ensure that at any time during the life of the nuclear station (i.e., Palo Verde, Units 1, 2 and 3) the annual total body dose due to ground contamination of an UNRESTRICTED AREA, arising from transportation and deposition by wind on the UNRESTRICTED AREA of the accumulated activity discharged to the onsite ponds from the secondary

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system of the plant (if the ponds get dried up and not cleaned up), is within the guidelines of 10 CFR Part 20 for the above-mentioned postulated event.

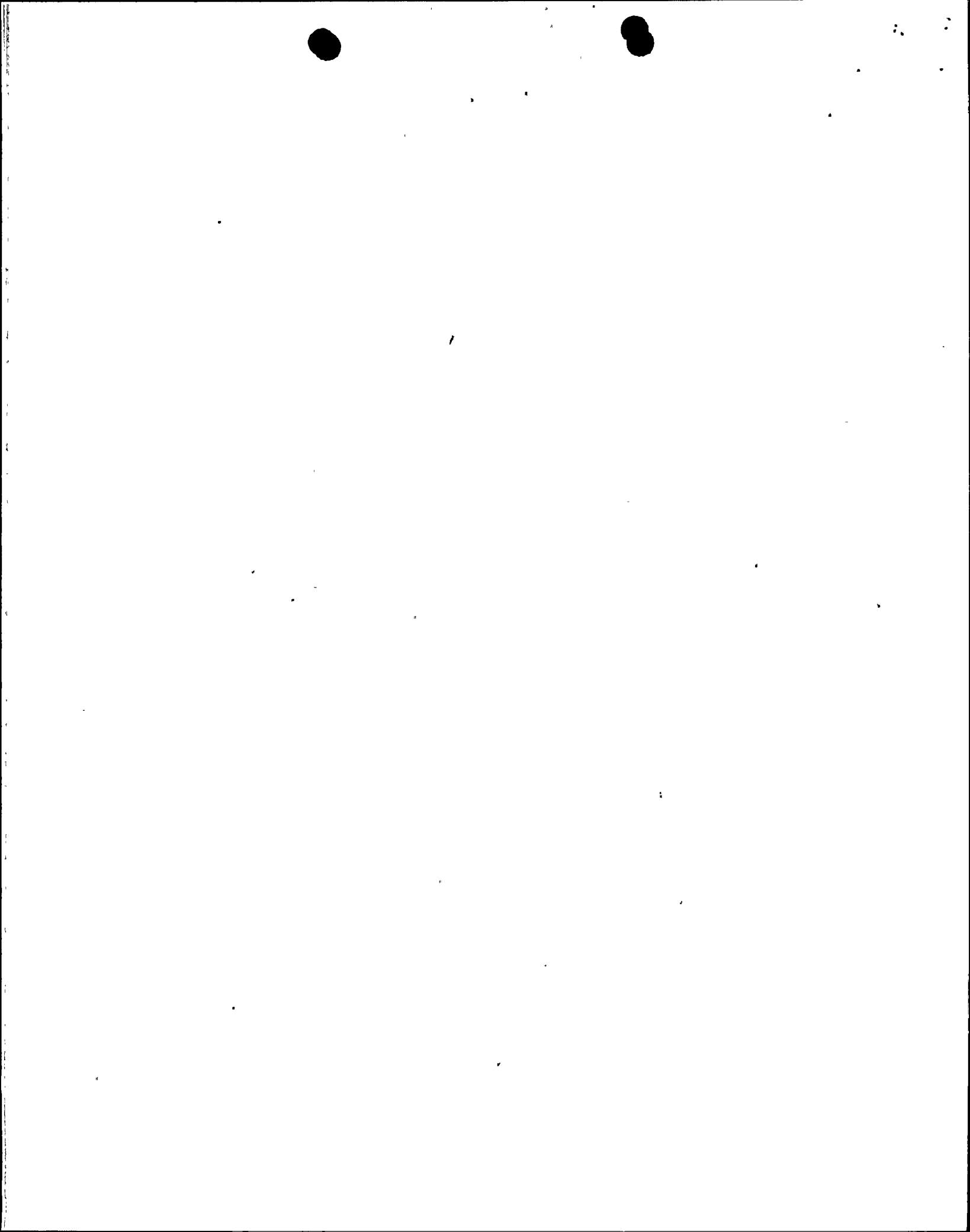
Restricting the concentrations of the secondary liquid wastes discharged to the onsite evaporation ponds will restrict the quantity of radioactive material that can be accumulated in the ponds. This, in turn, provides assurance that in the event of an uncontrolled release of the ponds' contents to an UNRESTRICTED AREA, the resulting total body exposure from ground contamination to a member of the public at the nearest exclusion area boundary will be less than 0.5 rem per year.

By letter dated March 23, 1987, the licensees had previously requested relief from Specification 3/4.11.1 for a period of 60 days. The staff approved that request on March 24, 1987, which allowed the release of secondary system liquid waste to the onsite evaporation pond while the concentration of principal gamma emitters in the liquid with half lives less than 75 days exceeded 5×10^{-7} $\mu\text{Ci/ml}$, provided that the concentration did not exceed the limits of 10 CFR Part 20, Appendix B, Table II, Column 2. The basis for granting the request is that the permitted action would have a negligible affect on the previously evaluated accident for the onsite ponds.

In the current request, dated May 10, 1987, the licensees state that during the week of April 27, 1987, they determined that the relief granted on March 24, 1987 would not afford adequate time for the removal of the isotope Antimony-124 (Sb-124), whose half life is 60 days. As a result, the licensees have requested additional relief from Specification 3/4.11.1 until March 31, 1988, to permit the release of secondary system liquid wastes with Sb-124 concentrations above 5×10^{-7} $\mu\text{Ci/ml}$.

The licensees state that all reasonable alternatives for removing the Sb-124 have been used without being able to reduce the concentrations to below 5×10^{-7} $\mu\text{Ci/ml}$. The licensees expect that by March 31, 1988, the secondary system will have undergone additional clean-up and radioactive decay to the point that the secondary system liquid discharges from Palo Verde, Unit 1, to the onsite evaporation pond will have concentrations that do not exceed 5×10^{-7} $\mu\text{Ci/ml}$. During this period of time, the licensees will actively pursue and evaluate alternatives for potential plant modifications.

By letter dated May 14, 1987, the licensees provided an evaluation of the effects of discharging to the onsite evaporation pond, secondary system liquid waste with an Antimony-124 concentration of 2×10^{-5} $\mu\text{Ci/ml}$ for the requested time period. Based on the results of that analysis, the licensees (1) indicate that about 1.4 curies of Antimony-124 will be discharged to the ponds during the requested time period, and (2) conclude that the dose contribution of Antimony-124 to the previously evaluated accident for the onsite ponds would be less than 10^{-2} mrem/year. The licensees also concluded that there is no Appendix I impact created by the addition of Antimony-124 to the pond since it is being discharged as a dissolved solid and will remain onsite in the pond.



3.0 EVALUATION

The staff has reviewed the licensees' request for relief to Specification 3/4.11.1, dated May 10, 1987, as supplemented by analyses submitted by letter dated May 14, 1987. The requested relief is to permit, until March 31, 1988, the discharge to the onsite evaporation pond of secondary system liquid waste while the concentration of Antimony-124 exceeds 5×10^5 $\mu\text{Ci/ml}$ provided that the concentration does not exceed 2×10^5 $\mu\text{Ci/ml}$.

On the basis of that review, the staff concurs with the licensees' assessment and has determined that: (1) based on licensees' analysis, about 1.4 curies of Antimony-124 will be discharged into the pond during this time period; and (2) since Antimony-124 has a radioactive half-life of about 60 days, essentially all of the 1.4 curies of Antimony-124 will have decayed away prior to the end of the plant's projected operating life. Since the pond is not expected to dry out during the operating life of the plant, the doses to members of the general public from routine operations are estimated to remain within the annual dose design objectives of 10 CFR 50, Appendix I. Consequently, the additional quantities of Antimony-124 that would be discharged into the evaporation pond during the next ten months would not lead to exposures significantly higher than those originally estimated.

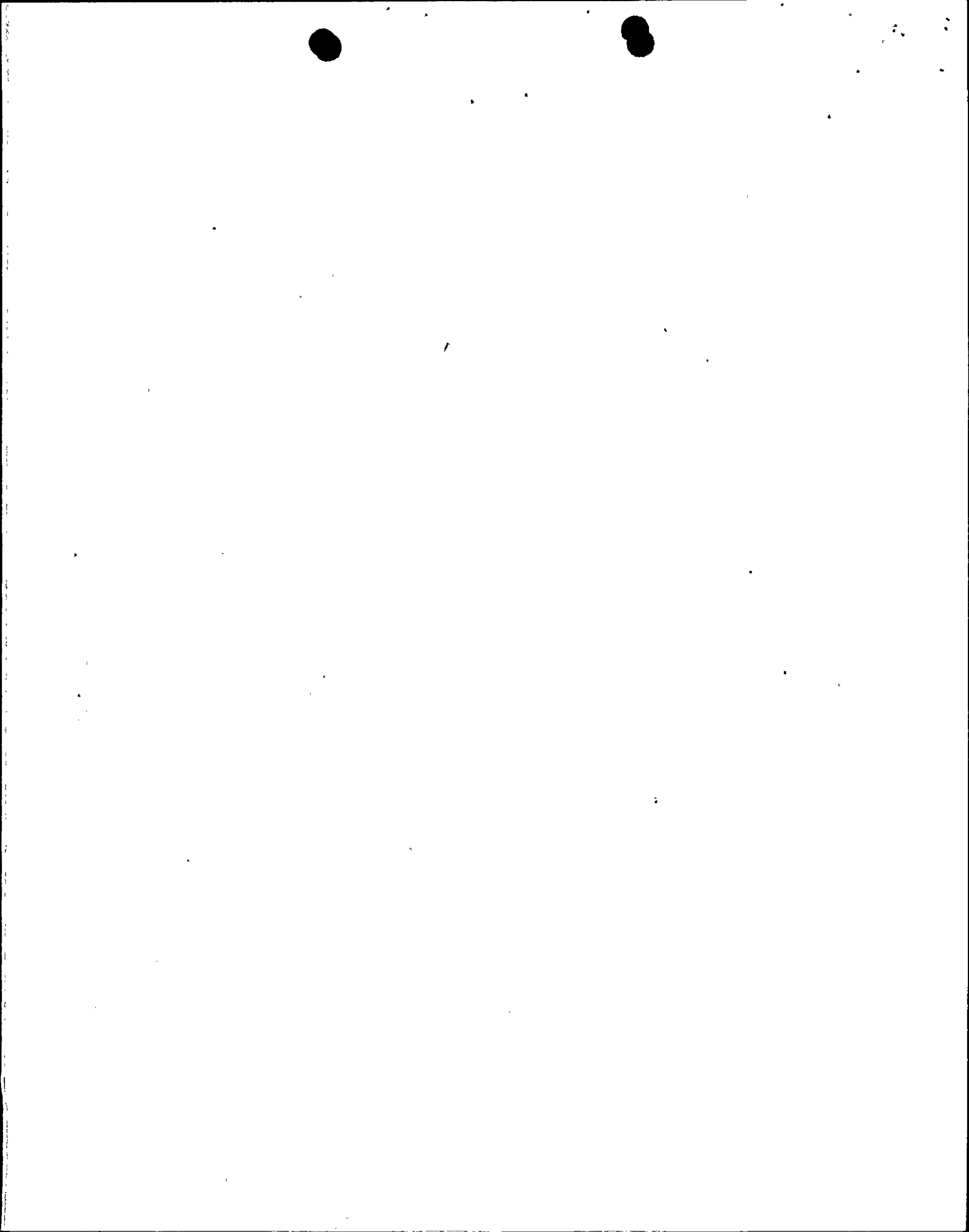
Based on the above evaluation, the staff concludes that the proposed change to Specification 3/4.11.1 is acceptable.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with a proposed amendment would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; (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.

A discussion of these standards and they relate to the amendment request follows.:

Standard 1 - Involve 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. The only previously evaluated accident that is affected by the change for the onsite evaporation ponds involves the annual total body dose due to ground contamination of an unrestricted area, arising from the transportation and deposition by wind of the accumulated activity discharged to the ponds during the life of the plant in the event that the pond dries up. The Technical Specifications are being changed to allow continued operation of the unit until March 31, 1988 while the concentration of radioactive material discharged from secondary liquid waste to the onsite evaporation ponds is above the lower limit of detectability but within the limits of 10 CFR Part 20, Appendix B, Table II. Since the half life of the material involved is less than 75 days, this will have a negligible effect on the previously evaluated accident. Therefore, this change does not involve a significant increase in the probability or consequences of any accident previously evaluated.

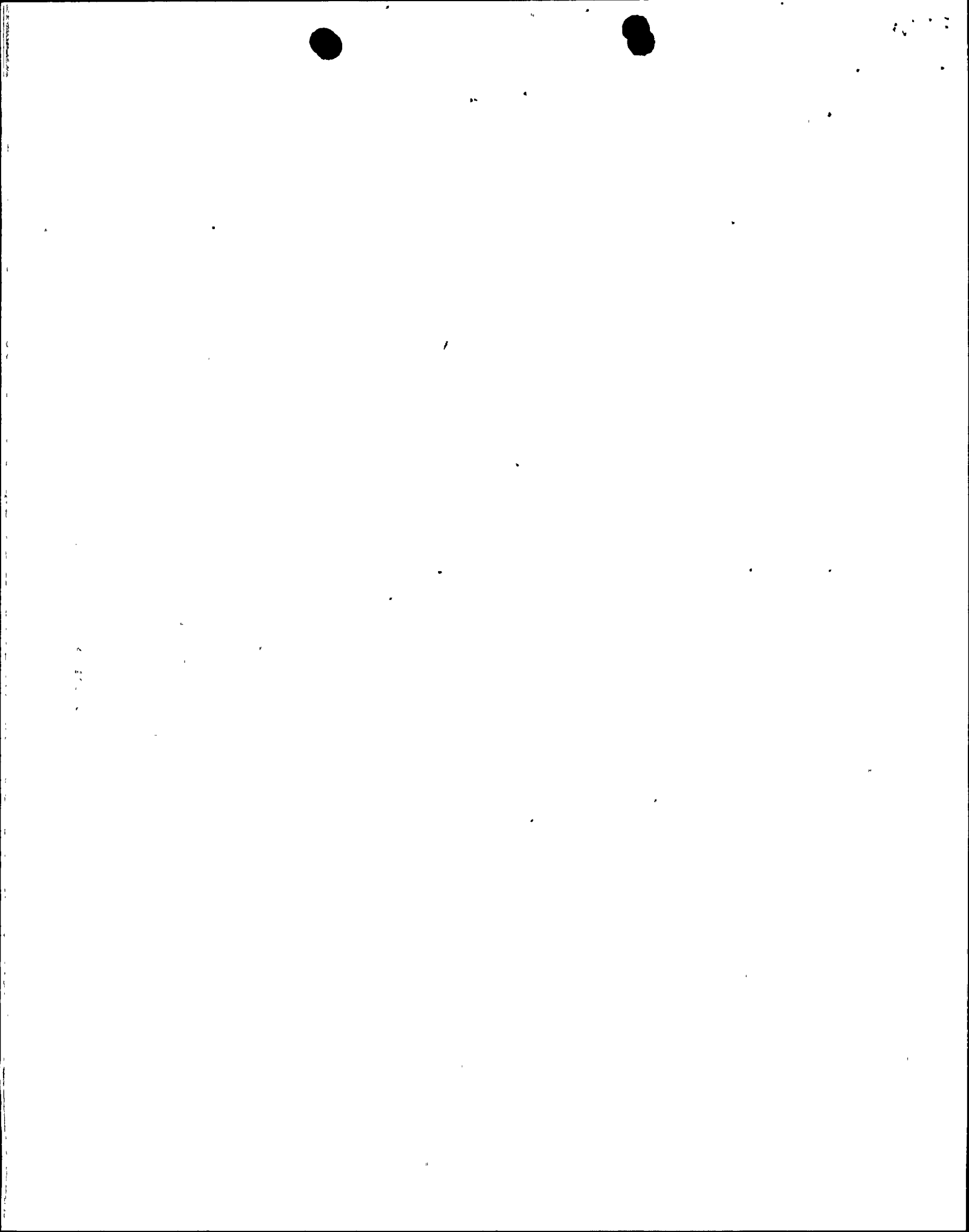
Standard 2 - Create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated. The only effect of this proposed change is to allow for temporary discharge to the onsite pond of higher concentrations of Antimony-124 in the radioactive liquids which have been generated during normal processing/regeneration of condensate polisher resins. The small amounts ($<2 \times 10^7$ $\mu\text{Ci/ml}$) of total activity present in regeneration wastes which will be discharged into the onsite evaporation ponds are within the limits of 10 CFR Part 20, Appendix B, Table II. As noted above, accidents involving discharges from the ponds have been previously evaluated and this change does not have a significant effect on such accidents.

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

The requested amendment does not involve a significant reduction in a margin of safety because the proposed change does not affect the design basis of the plant. The existing limits for concentrations of radioactive material discharged from secondary system liquid waste to the onsite evaporation ponds will remain at 5×10^7 $\mu\text{Ci/ml}$ for principal gamma emitters. However, releases of Antimony-124 with a half life of 60 days may be allowed to exceed 5×10^7 $\mu\text{Ci/ml}$ but will be limited to 10 CFR 20, Appendix B, Table II concentrations for a period not to exceed March 31, 1988 and will remain onsite in the evaporation pond. For these reasons, it has been determined that the change does not involve a significant reduction in the margin of safety.

The staff, therefore, concludes that operation of the facility in accordance with the proposed change does not represent a significant hazards consideration.



5.0 CONTACT WITH STATE OFFICIAL

The Arizona Radiation Regulatory Agency has been advised of the proposed determination of no significant hazards consideration with regard to this amendment request. No comments were received.

6.0 ENVIRONMENTAL CONSIDERATION

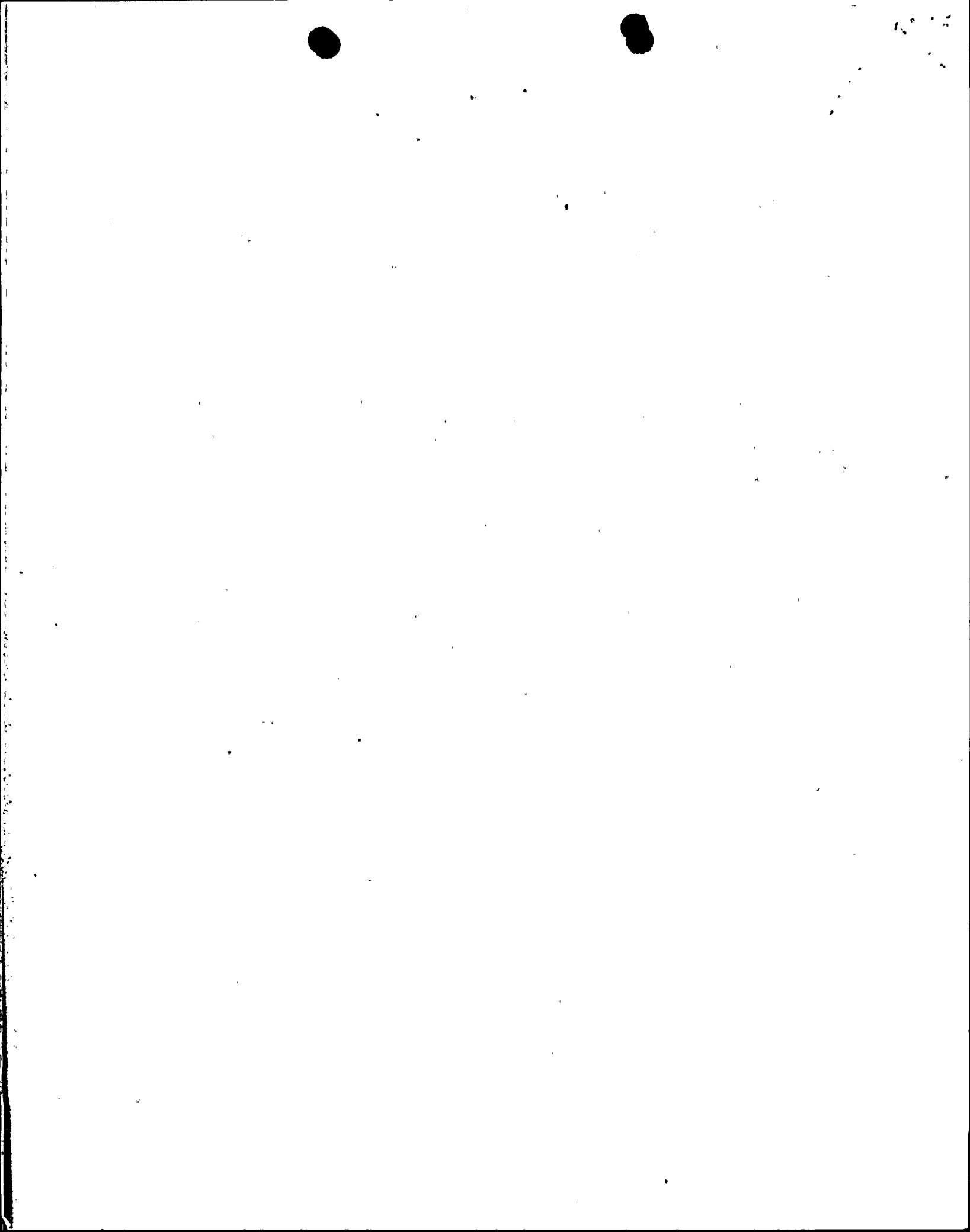
This amendment involves changes in the installation or use of facility components located within the restricted area. The staff has determined that the amendment involves no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

7.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that (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 this amendment will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed change is acceptable.

Principal contributor: E. Branagan

Dated: June 3, 1987



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**NOTICE OF ISSUANCE OF
AMENDMENT TO FACILITY
OPERATING LICENSE AND FINAL
DETERMINATION OF NO
SIGNIFICANT HAZARDS
CONSIDERATION AND
OPPORTUNITY FOR HEARING
(EXIGENT OR EMERGENCY
CIRCUMSTANCES)**

During the period since publication of the last bi-weekly notice, the Commission has issued the following amendments. The Commission has determined for each of these amendments that the application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment.

Because of exigent or emergency circumstances associated with the date the amendment was needed, there was not time for the Commission to publish, for public comment before issuance, its usual 30-day Notice of Consideration of Issuance of Amendment and Proposed No Significant Hazards Consideration Determination and Opportunity for Hearing. For exigent circumstances, the Commission has either issued a Federal Register notice providing opportunity for public comment or has used local media to provide notice to the public in the area surrounding a licensee's facility of the licensee's application and of the Commission's proposed determination of no significant hazards consideration. The Commission has provided a reasonable opportunity for the public to comment, using its best efforts to make available to the public means of communication for the public to respond quickly, and in the case of telephone comments, the comments have been recorded or transcribed as appropriate and the licensee has been informed of the public comments.

In circumstances where failure to act in a timely way would have resulted, for example, in derating or shutdown of a nuclear power plant or in prevention of either resumption of operation or of increase in power output up to the plant's licensed power level, the Commission may not have had an opportunity to provide for public comment on its no significant hazards determination. In such case, the license amendment has been issued without opportunity for comment. If there has been some time for public comment but less than 30 days, the Commission may



provide an opportunity for public comment. If comments have been requested, it is so stated. In either event, the State has been consulted by telephone whenever possible.

Under its regulations, the Commission may issue and make an amendment immediately effective, notwithstanding the pendency before it of a request for a hearing from any person, in advance of the holding and completion of any required hearing, where it has determined that no significant hazards consideration is involved.

The Commission has applied the standards of 10 CFR 50.92 and has made a final determination that the amendment involves no significant hazards consideration. The basis for this determination is contained in the documents related to this action. Accordingly, the amendments have been issued and made effective as indicated.

Unless otherwise indicated, the Commission has determined that these amendments satisfy the criteria for categorical exclusion in accordance with 10 CFR 51.22. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for these amendments. If the Commission has prepared an environmental assessment under the special circumstances provision in 10 CFR 51.12(b) and has made a determination based on that assessment, it is so indicated.

For further details with respect to the action see (1) the application for amendment, (2) the amendment to Facility Operating License, and (3) the Commission's related letter, Safety Evaluation and/or Environmental Assessment, as indicated. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, DC, and at the local public document room for the particular facility involved.

A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Director, Division of Licensing.

The Commission is also offering an opportunity for a hearing with respect to the issuance of the amendments. By August 14, 1987, the licensee 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. 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, and the bases for each contention set forth with reasonable specificity. Contentions shall be limited to matters within the scope of the amendment under consideration. 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.

Since the Commission has made a final determination that the amendment

involves no significant hazards consideration, if a hearing is requested, it will not stay the effectiveness of the amendment. Any hearing held would take place while the amendment is in effect.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, NW., Washington, DC, 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 (800) 325-6000 (in Missouri (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to (Project Director): 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-Bethesda, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to the attorney for the licensee.

Non timely 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 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).

Arizona Public Service Company, et al., Docket No. STN 50-523, Palo Verde Nuclear Generating Station (PVNGS), Unit 1, Maricopa County, Arizona

Date of application for amendment: May 10, 1987, as supplemented by letter dated May 14, 1987.

Brief description of amendment: The amendment revises Technical Specification 3/4.11.1 for a period not to exceed March 31, 1988, to allow the release of secondary system liquid waste to the onsite evaporation pond, while the concentration of Antimony-124 exceeds 5×10^{-7} micro Ci/ml, provided that the concentration does not exceed the limits of 10 CFR Part 20, Appendix B, Table II, Column 2.

Date of issuance: June 3, 1987

Effective date: June 3, 1987

Amendment No.: 18

Facility Operating License No. NPF-41: Amendment revised the Technical Specifications.

Public comments requested as to proposed no significant hazards consideration: Yes (52 FR 18763, May 19, 1987). No comments were received by the due date. A request for an extension of the comment period was received after the amendment was issued.

The Commission's related evaluation of the amendment, finding of exigent circumstances, consultation with the State of Arizona, and final determination of no significant hazards consideration are contained in a Safety Evaluation dated June 3, 1987.

Attorney for licensees: Mr. Arthur C. Gehr, Snell & Wilmer, 3100 Valley Center, Phoenix, Arizona 85007.

Local Public Document Room location: Phoenix Public Library, Business, Science and Technology Department, 12 East McDowell Road, Phoenix, Arizona 85004.

NRC Project Director: George W. Knighton

Public Service Electric & Gas Company,
Docket No. 50-354, Hope Creek
Generating Station, Salem County, New
Jersey

Date of application for amendment:
June 1, 1987, as supplemented June 2 and
4, 1987

Brief description of amendment: The amendment revised the Hope Creek Technical Specifications to permit the plant to continue operation until September 21, 1987, or until the first forced outage of sufficient duration to repair the monitor, whichever first occurs, with the acoustic monitor for one of the safety relief valve tailpipes inoperable.

Date of Issuance: June 17, 1987

Effective Date: June 4, 1987

Amendment No.: 5

Facility Operating License No. NPF-57: Amendment revised the Technical Specifications.

Public comments requested as to proposed no significant hazards consideration: No.

The Commission's related evaluation of the amendment, consultation with the State of New Jersey and final no significant hazards considerations determination are contained in a Safety Evaluation dated June 17, 1987.

Attorney for licensee: Conner and Wetterhahn, 1747 Pennsylvania Avenue, Washington, DC 20006

Local Public Document Room location: Pennsville Public Library, 190 S. Broadway, Pennsville, New Jersey 08070.

NRC Project Director: Walter R. Butler

Dated at Bethesda, Maryland this 9th day of July, 1987.

For the Nuclear Regulatory Commission
Steven A. Varga,
Director, Division of Reactor Projects I/II,
Office of Nuclear Reactor Regulation
[FR Doc. 87-15905 Filed 7-14-87; 8:45 am]
BILLING CODE 7590-01-D

