

APPENDIX B

TO FACILITY OPERATING LICENSE NO. NPF-34
PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

ARIZONA PUBLIC SERVICE COMPANY, ET AL
DOCKET NO. 50-528

ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

DECEMBER 1984

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ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

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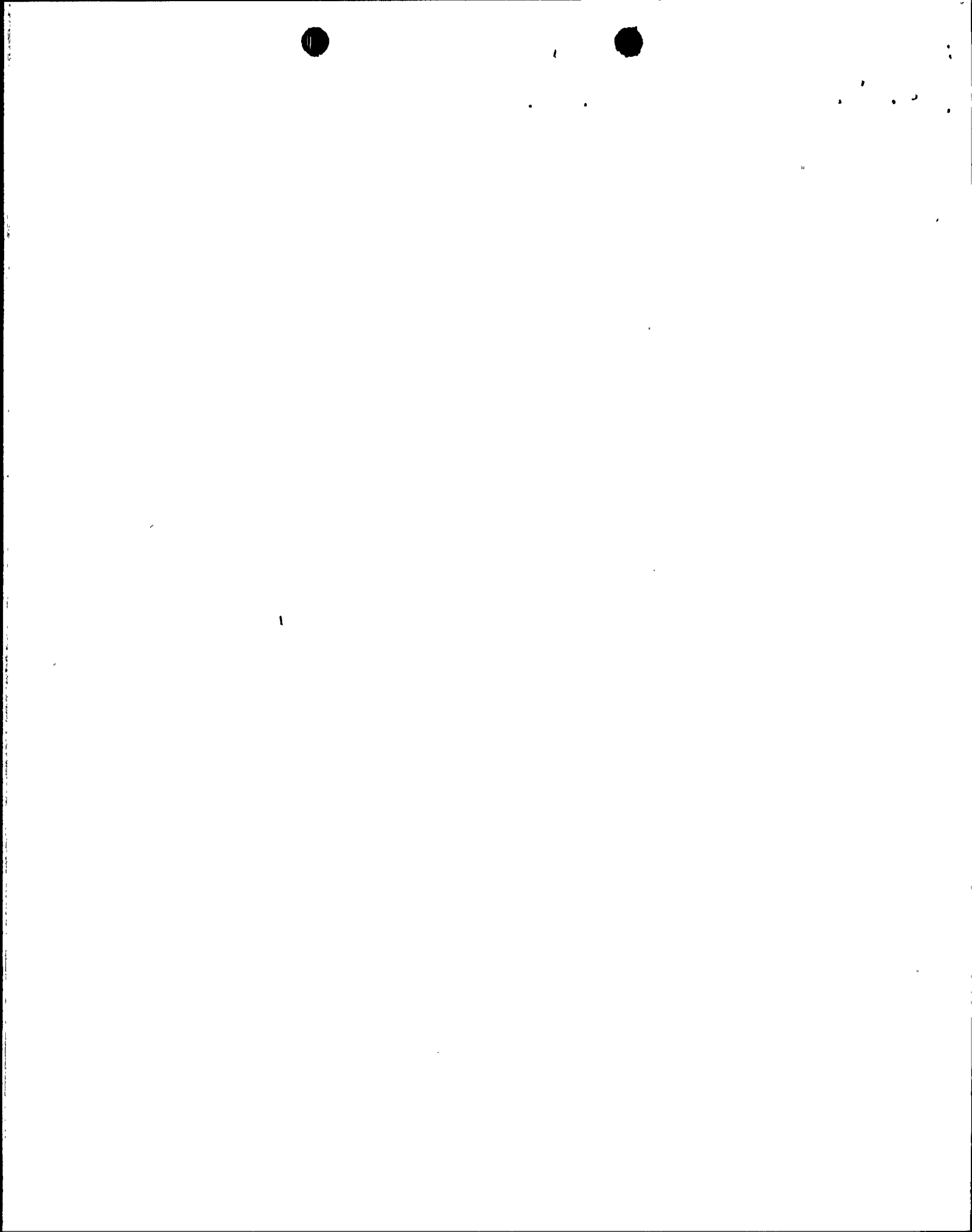
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1.0 Objectives of the Environmental Protection Plan

The Environmental Protection Plan (EPP) is to provide for protection of environmental values during construction and operation of the nuclear facility. The principal objectives of the EPP are as follows:

- (1) Verify that the station is operated in an environmentally acceptable manner, as established by the FES and other NRC environmental impact assessments.
- (2) Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
- (3) Keep NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.



2.0 Environmental Protection Issues

In the FES-OL dated February 1982, the staff considered the environmental impacts associated with the operation of the Palo Verde Nuclear Generating Station. Certain environmental issues were identified which required study or license conditions to resolve environmental concerns and to assure adequate protection of the environment.

2.1 Aquatic Issues

Because there will be no station effluents discharged to natural surface water bodies, station operation will have no direct adverse impacts on the quality of surface water. Therefore, there are no aquatic issues raised by the staff in the FES-OL.

2.2 Terrestrial Issues

No new terrestrial issues requiring environmental monitoring programs were identified in the FES-OL. The FES-CP did identify a program for monitoring the effects of salt deposition due to cooling tower drift. The requirements for this program specified in Subsection 4.2.2 of this EPP.

2.3 Cultural Resources Issues

Upon resolution of the final alignment of the PVNGS-to-Saguaro transmission line, the applicant will conduct an appropriate cultural resource survey relative to the corridor for NRC review and evaluation pursuant to condition 7.f. of the construction permit (FES-CP, p. iii). There is a need to protect any cultural resources sites identified in the survey which may be eligible for or which are included in the National Register of Historic Places. NRC requirements with regard to the cultural resources issues are specified in Subsection 4.2.1 of this EPP.



3.0 Consistency Requirements

3.1 Plant Design and Operation

The licensees may make changes in station design or operation or perform tests or experiments affecting the environment provided such changes, tests or experiments do not involve an unreviewed environmental question, and do not involve a change in the Environmental Protection Plan. Changes in plant design or operation or performance of tests or experiments which do not affect the environment are not subject to the requirements of this EPP. Activities governed by Subsection 3.2 of this EPP are not subject to the requirements of this subsection.

Before engaging in additional construction or operational activities which may affect the environment, the licensees shall prepare and record an environmental evaluation of such activity*. When the evaluation indicates that such activity involves an unreviewed environmental question, the licensees shall provide a written evaluation of such activities and obtain prior approval from the NRC. When such activity involves a change in the Environmental Protection Plan, such activity and change to the Environmental Protection Plan may be implemented only in accordance with an appropriate license amendment as set forth in Subsection 5.3 of this EPP.

A proposed change, test or experiment shall be deemed to involve an unreviewed environmental question if it concerns (1) a matter which may result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level or (3) a matter not previously reviewed and evaluated in the documents specified in (1) of this subsection, which may have a significant adverse environmental impact.

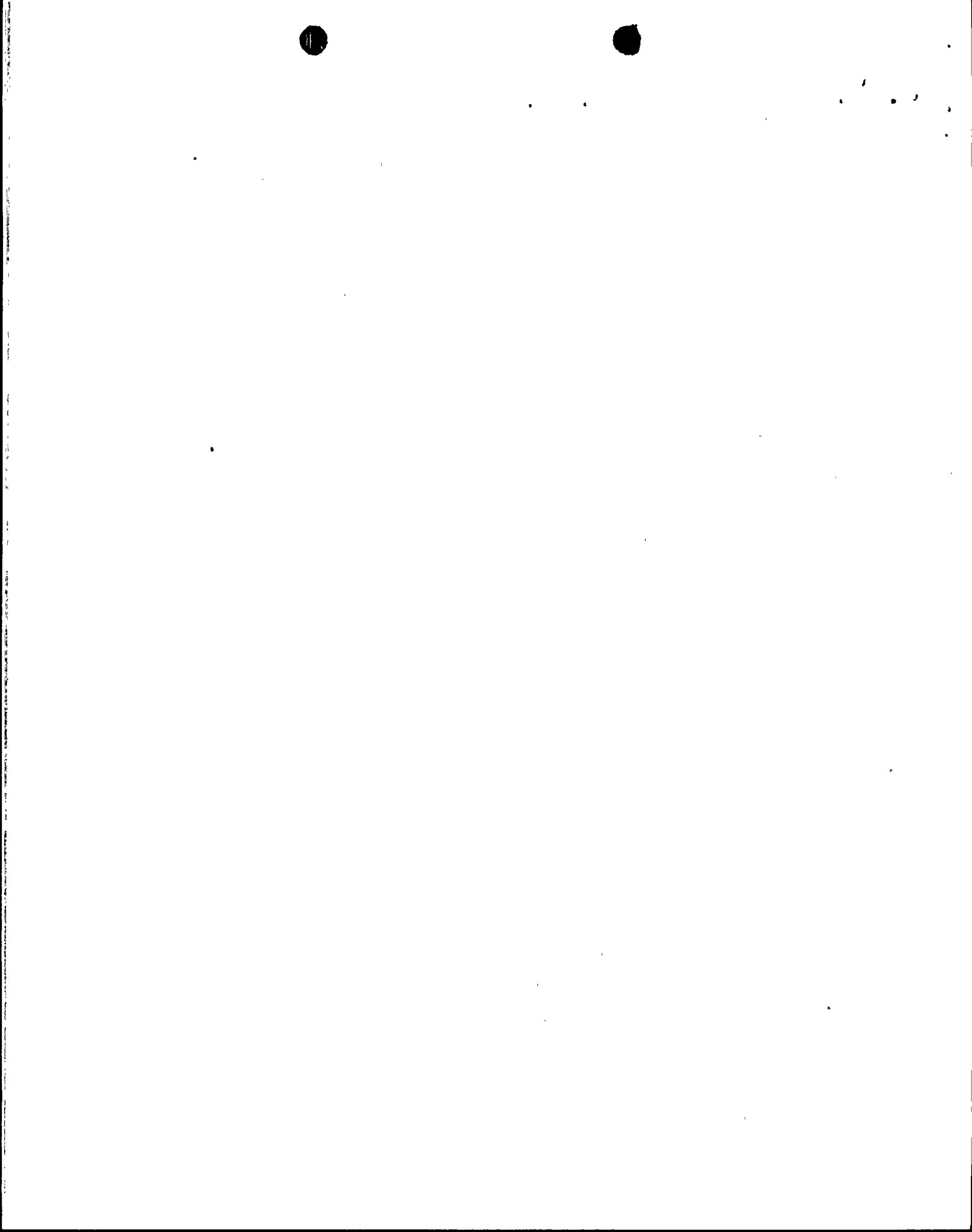
The licensees shall maintain records of changes in facility design or operation and of tests and experiments carried out pursuant to this subsection. These records shall include a written evaluation which provide bases for the determination that the change, test, or experiment does not involve an unreviewed environmental question nor constitute a decrease in the effectiveness of this EPP to meet the objectives specified in Section 1.0. The licensees shall include as part of their Annual Environmental Operating Report (per Subsection 5.4.1 of this EPP) brief descriptions, analyses, interpretations, and evaluations of such changes, tests and experiments.

*Activities are excluded from this requirement if all measurable nonradiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction.



3.2 Changes Required for Compliance with Other Environmental Regulations

Changes in plant design or operation and performance of tests or experiments which are required to achieve compliance with other Federal, State, or local environmental regulations are not subject to the requirements of Subsection 3.1 of this EPP.



4.0 Environmental Conditions

4.1 Unusual or Important Environmental Events

Any occurrence of an unusual or important event that indicates, or could result in, significant environmental impact causally related to plant operation shall be recorded and promptly reported to the NRC within 24 hours by telephone, telegraph, or facsimile transmissions followed by a written report per Subsection 5.4.2 of this EPP. The following are examples: excessive bird impact events, onsite plant or animal disease outbreaks, mortality or unusual occurrence of any species protected by the Endangered Species Act of 1973, fish kills, and an increase in nuisance organisms or conditions.

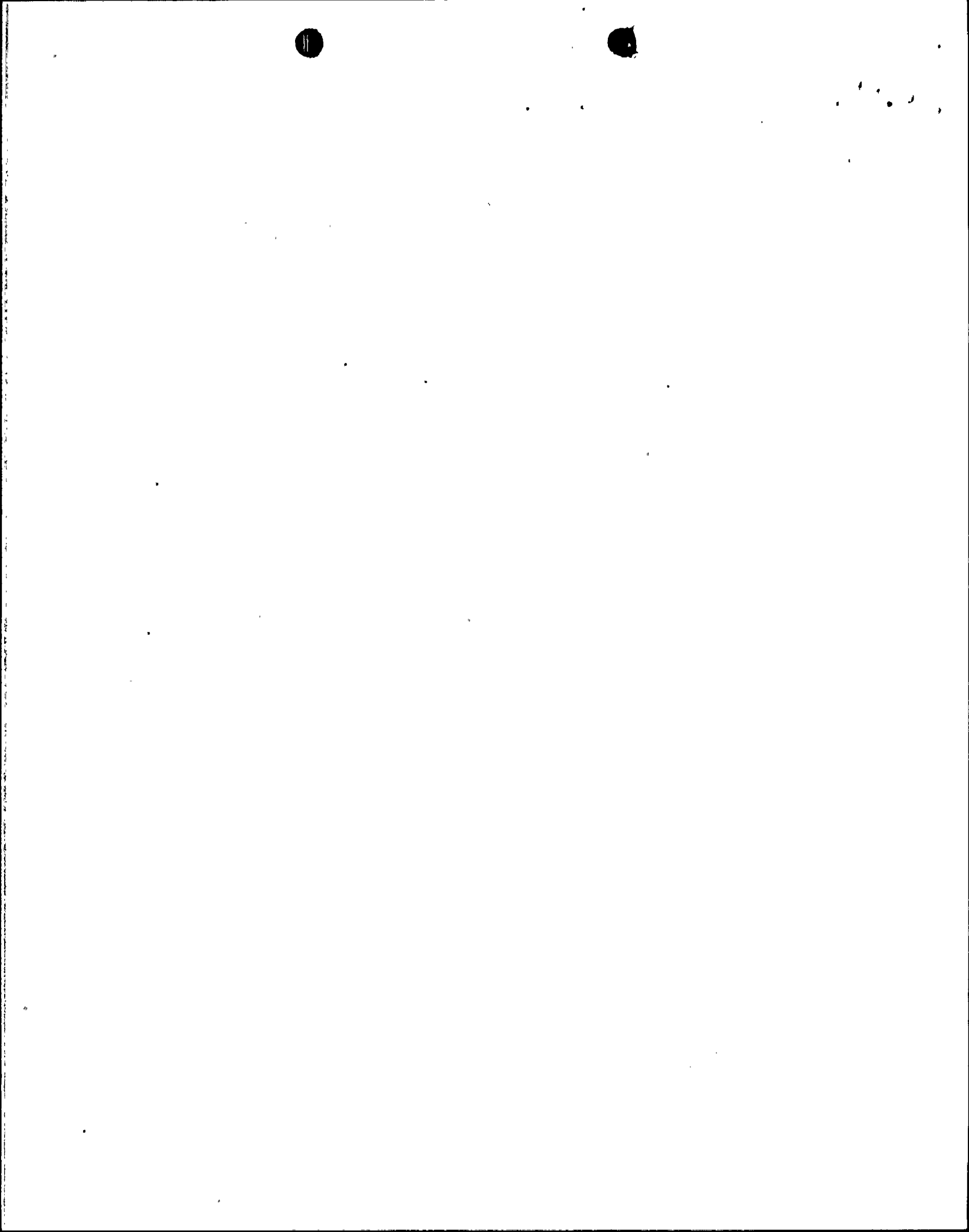
No routine monitoring programs are required to implement this condition.

4.2 Environmental Monitoring

4.2.1 Cultural Resources

Section 4.3.6 of the FES-OL states, "No Archeological surveys have been undertaken in the PVNGS-to-Saguaro corridor because the construction of this line is not scheduled until 1984-1986. When a final alignment for the Saguaro transmission line is selected, appropriate archeological surveys will be undertaken and submitted for staff review and evaluation pursuant to condition 7.f. of the construction permit (FES-CP, p. iii)." The licensees should consult with the State Historic Preservation Office (SHPO) and the NRC in developing an appropriate cultural resource survey. A survey report will be submitted to NRC for review. Should the survey identify significant sites which may be eligible for the National Register of Historic Places, the licensees shall be required to provide the NRC with the information necessary to initiate a determination of eligibility request to the Keeper of the National Register. The U.S. Department of Interior form entitled, "National Register of Historic Places Inventory-Nomination Form," should be filled out in detail with appropriate maps and other materials for each such site and returned to the NRC. Item 12 of the form need not be filled out. The licensees should refer to the Federal Register, September 21, 1977, Part 11, for detailed guidance. The NRC requests the licensees to take appropriate measures to protect such sites during the determination of eligibility process. Upon receipt and review of the information, the NRC will forward the materials to the Keeper for action. If the Keeper rules the sites are not eligible, the finding will be filed and this subsection of the EPP is fully satisfied with no further action required.

If the Keeper rules that any of the sites are eligible for the National Register, the licensees are required to provide the NRC with the information with regard to completing a determination of effect which the operation and maintenance activities of the plant may have on the eligible sites. The licensees should follow the steps presented in 36 CFR 800.3 and 36 CFR 800.4 in developing the information. Upon receipt of the information, the NRC, in consultation with the SHPO, will complete the determination of effect process. If the determination results in a no effect determination as provided in 36 CFR 800.4(4)(B)(1), the documentation will be filed and this subsection of the EPP is fully satisfied with no further action required.



If the determination results in an effect determination, the licensees will be required to provide the NRC with information adequate to document the effect determination and an appropriate action program which the licensees have developed in consultation with the SHPO and concurred in by the SHPO. Upon review of the program, the NRC will forward the documentation to the Advisory Council on Historic Preservation (ACHP) for comment.

After ACHP comment is received by NRC, the program will be revised, if necessary, to incorporate any comments provided by the ACHP. The licensees shall then proceed, in consultation with the SHPO, to implement the proposed program. Upon completion of the program, a report shall be submitted to the NRC which will include a description of the results of the program and the disposition of data recovered (if applicable). Upon submittal of this report, this subsection of the EPP is fully satisfied with no further action required.

4.2.2 Terrestrial Ecology Monitoring

The licensees will implement the Salt Deposition and Impact Monitoring Plan provided to NRC by letter dated September 29, 1983 from E. E. Van Brunt, Jr., Arizona Public Service Company, to G. Knighton, U. S. Nuclear Regulatory Commission. The purpose of the Plan is to assess the impacts of cooling tower salt drift on soils, native vegetation and agricultural crops in the PVNGS vicinity.

The monitoring program shall commence by the onset of commercial operation of the first unit and continue for a minimum of three full years after the onset of operation of all three PVNGS Units or until such time that the licensees can demonstrate to the satisfaction of the NRC that the objectives of the study have been fulfilled. Annual monitoring reports shall be submitted to the NRC for review.

The licensees may not make changes in the procedures described in the document without prior NRC approval unless the proposed changes do not affect the program objectives described in the introduction to the Monitoring Plan. For example, changes in the procedures, which affect sampling frequency, location, gear, or replication, can be made without prior NRC approval, but shall be reported to the NRC within 30 days after their implementation. These reports shall describe the changes made, the reasons for making the changes, and a statement showing how continuity of the study will be affected. Any modifications or changes of the initially approved program shall be governed by the need to maintain consistency with previously used procedures so that direct comparisons of data are technically valid. Such modifications or changes shall be justified and supported by adequate comparative sampling programs or studies demonstrating the comparability of results or which provide a basis for making adjustments that would permit direct comparisons. The licensees shall maintain at the site, available for inspection, a copy of the Monitoring Plan with all revisions.



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5.0 Administrative Procedures

5.1 Review and Audit

The licensees shall provide for review and audit of compliance with the Environmental Protection Plan. The audits shall be conducted independently of the individuals or groups responsible for performing the specific activity. A description of the organizational structure utilized to achieve the independent review and audit function and the results of the audit activities shall be maintained and made available for inspection.

5.2 Records Retention

Records and logs relative to the environmental aspects of plant operation shall be made and retained in a manner convenient for review and inspection. These records and logs shall be made available to NRC on request.

Records of modifications to plant structures, systems and components determined to potentially affect the continued protection of the environment shall be retained for the life of the plant. All other records, data and logs relating to this EPP shall be retained for five years or, where applicable, in accordance with the requirements of other agencies.

5.3 Changes in Environmental Protection Plan

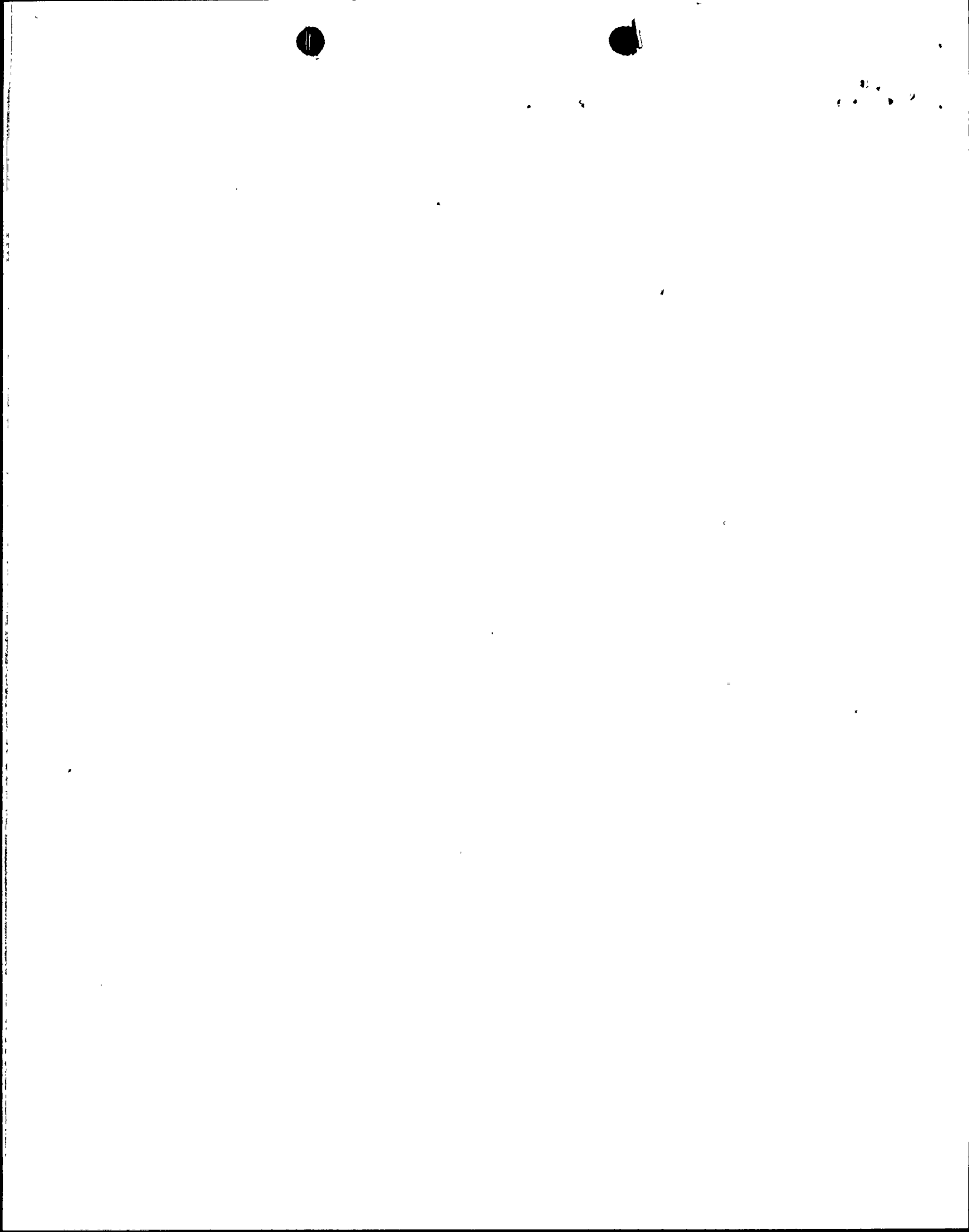
Request for change in the Environmental Protection Plan shall include an assessment of the environmental impact of the proposed change and a supporting justification. Implementation of such changes in the EPP shall not commence prior to NRC approval of the proposed changes in the form of a license amendment incorporating the appropriate revision to the Environmental Protection Plan.

5.4 Plant Reporting Requirements

5.4.1 Routine Reports

An Annual Environmental Operating Report describing implementation of this EPP for the previous year shall be submitted to the NRC prior to May 1 of each year. The initial report shall be submitted prior to May 1 of the year following issuance of the operating license. The period of the first report shall begin with the date of issuance of the operating license for the first operational unit.

The report shall include summaries and analyses of the results of the environmental protection activities required by Subsection 4.2 of this Environmental Protection Plan for the report period, including a comparison with preoperational studies, operational controls, and an assessment of the observed impacts of the plant operation on the environment (as appropriate). If harmful effects or evidence of trends towards irreversible damage to the environment are observed, the licensees shall provide a detailed analysis of the data and a proposed course of action to alleviate the problem.



The Annual Environmental Operating Report shall also include:

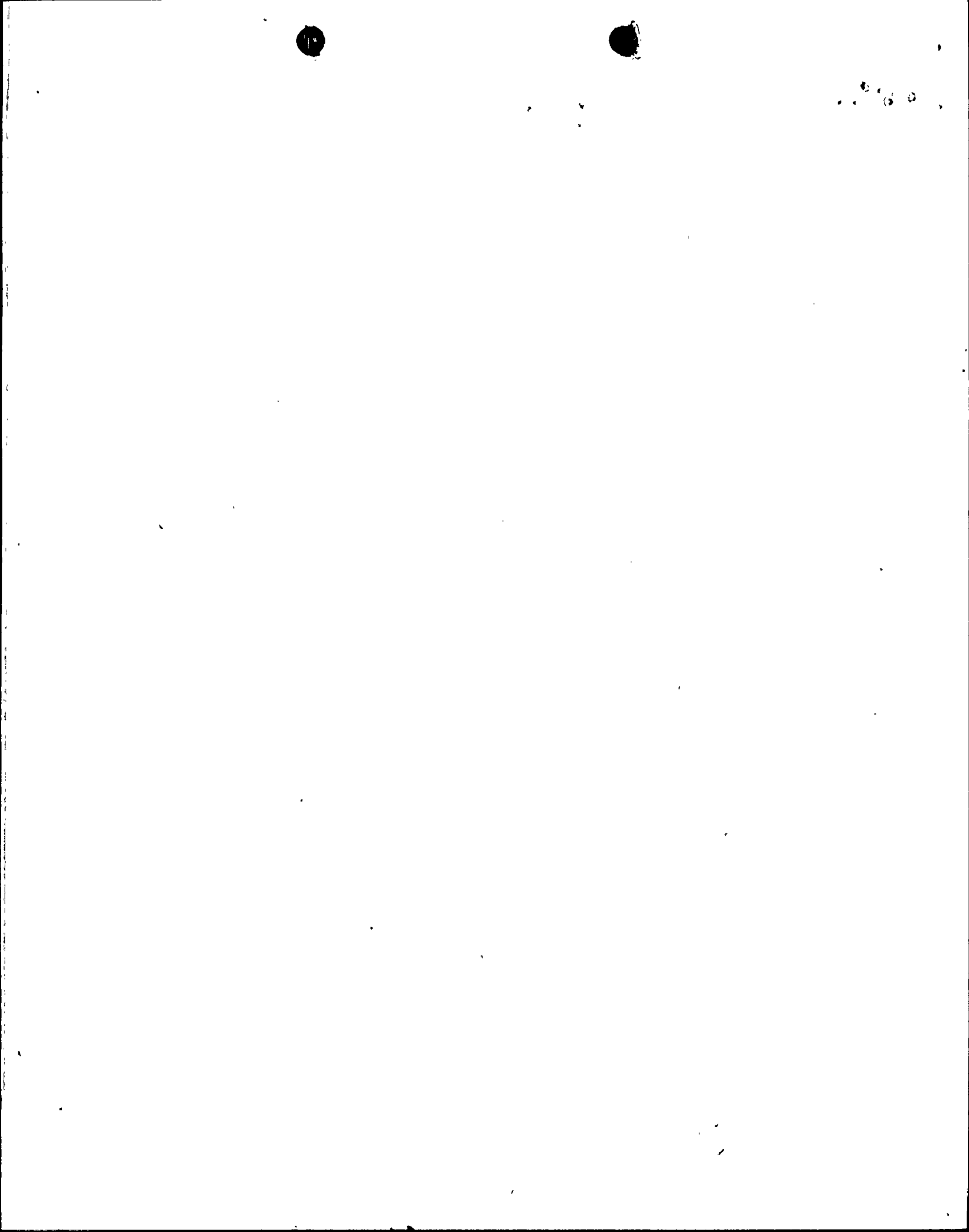
- (a) A list of EPP noncompliances and the corrective actions taken to remedy them.
- (b) A list of all changes in station design or operation, tests, and experiments made in accordance with Subsection 3.1 of this EPP which involved a potentially significant unreviewed environmental issue.
- (c) A list of nonroutine reports submitted in accordance with Subsection 5.4.2 of this EPP.

In the event that some results are not available by the report due date, the report shall be submitted noting and explaining the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

5.4.2 Nonroutine Reports

A written report shall be submitted to the NRC within 30 days of occurrence of nonroutine event. The report shall (a) describe, analyze, and evaluate the event, including the extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

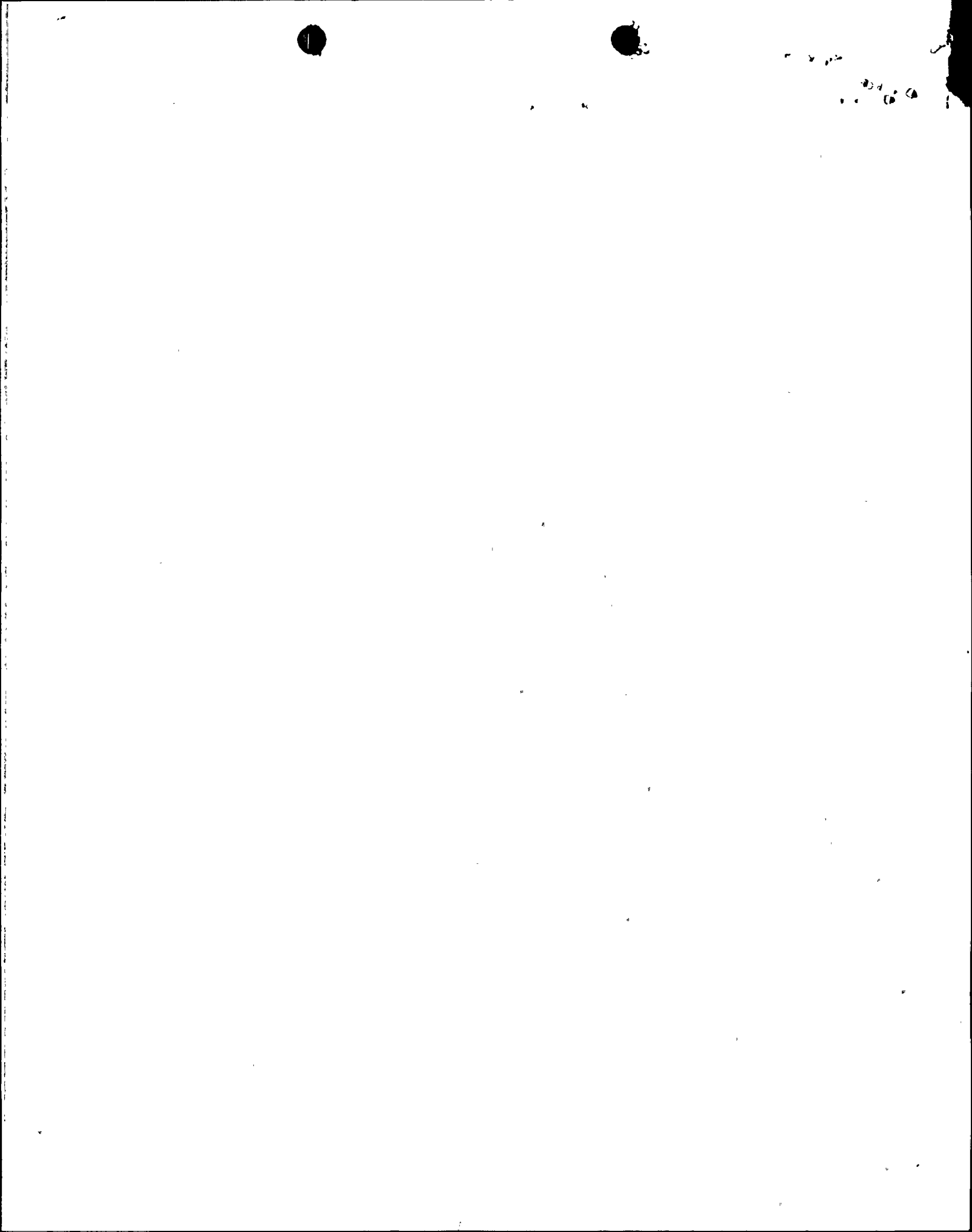
Events reportable under this subsection which also require reports to other Federal, State or local agencies shall be reported in accordance with those reporting requirements in lieu of the requirements of this subsection. The NRC shall be provided a copy of such report at the same time it is submitted to the other agency.



APPENDIX CANTITRUST CONDITIONS
LICENSE NO. NPF-34

Arizona Public Service Company and the Salt River Project Agricultural Improvement and Power District shall comply with the following antitrust conditions:

1. In connection with the antitrust conditions, the following definitions are used herein:
 - A. "Bulk Power" means the electric power, and any attendant energy, supplied or made available at transmission or subtransmission voltage by one entity to another.
 - B. "Entity" means a person, private or public corporation, a municipality, a cooperative, an association, a joint stock association or business trust owning, operating or proposing in good faith to own or operate equipment or facilities for the generation, transmission or distribution of electricity to or for the public as a utility.
 - C. "Joint Applicant(s)" means the Arizona Public Service Company and the Salt River Project Agricultural Improvement and Power District.
2.
 - A. Each joint applicant will transmit Bulk Power over its transmission system, between or among two or more Entities with which it is interconnected, or will be interconnected in the future, without restrictions on use or resale of the power so transmitted, provided that such services can reasonably be accommodated from a technical standpoint without impairing each joint applicant's reliability or its own use of its facilities.
 - B. Each joint applicant is obligated under this condition to transmit Bulk Power on the terms stated above, and in connection with each joint applicant's plan to construct new transmission facilities for its own use, to include in its planning and construction program sufficient transmission capacity for such Bulk Power transactions, provided that such applicant has received sufficient advance notice as may be necessary from a technical standpoint to accommodate the requirements of any requesting entity, and further provided that such entity(ies) are obligated as may be agreed (i) to share the capital, operating and maintenance costs of such new transmission facilities to the extent that additional costs burdens would be imposed on such joint applicant or (ii) to compensate the joint applicant fully for the use of its system.



3. The foregoing shall be implemented in a manner consistent with the provisions of the Federal Power Act as applicable and all rates, charges or practices in connection herewith are to be subject to the approval of regulatory agencies having jurisdiction over them.

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