



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

DEC 31 1984

Docket No.: 50-528

Mr. E. E. Van Brunt, Jr.
Vice President - Nuclear Projects
Arizona Public Service Company
Post Office Box 21666
Phoenix, Arizona 85036

Dear Mr. Van Brunt:

Subject: Palo Verde Nuclear Generating Station, Unit 1 - Issuance of Facility
Operating License

500 TECT 5/6/85

The U. S. Nuclear Regulatory Commission has issued the enclosed Facility Operating License No. NPF-34 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 for the Palo Verde Nuclear Generating Station, Unit 1 located in Maricopa County, Arizona.

License No. NPF-34 authorizes operation of the Palo Verde Nuclear Generating station, Unit 1 up to five percent of full power (190 megawatts thermal), and is issued without prejudice to future consideration by the Commission for a full power license. Although it is restricted to five percent power, this license contains conditions that will be included in the full power license.

A copy of a related Federal Register Notice, the original of which has been forwarded to the Office of the Federal Register for publication, is enclosed. Also enclosed is an assessment of the effect of 40-year license duration from the license issuance date with respect to environmental matters.

For your information, enclosed is a copy of the Notice of Environmental Assessment and Finding of No Significant Impact. This notice relates to exemptions authorized by Facility Operating License No. NPF-34.

The Commission has also issued Supplement No. 7 to the Safety Evaluation Report related to operation of the Palo Verde Nuclear Generating Station. This supplement contains the bases for many of the license conditions for Facility Operating License No. NPF-34. Two copies of Supplement No. 7 are enclosed. Additional copies will be sent to you following printing.

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Eight signed copies of Amendments No. 2 and No. 3 to Indemnity Agreement No. B-95 which cover the activities authorized under License No. NPF-34 are also enclosed. Please have each license sign all copies and return one copy of each amendment to this office.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License No. NPF-34
2. Federal Register Notice
3. Assessment of the Effect of 40-Year License Duration
4. Environmental Assessment
5. Supplement No. 7 to SER
6. Amendment No. 2 to Indemnity Agreement No. B-95
7. Amendment No. 3 to Indemnity Agreement No. B-95

cc: w/Enclosures
See next page

Previous concurrences concurred on by*:

DE
*Atoalston
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OSP
*IDinitz
12/24/84

OELD
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Procedures
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Palo Verde

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Arizona Radiation Regulatory Agency
ATTN: Ms. Clara Palovic, Librarian
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Chairman
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Defense Mapping Agency Aerospace
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U.S. Environmental Protection Agency
Room 2119, A104
401 M Street, S.W.
Washington, D.C. 20460

DISTRIBUTION: *w/Tech Specs

Docket File*

ISSUANCE OF FAC. OPERATING LICENSE FOR PALO VERDE, UNIT 1

NRC PDR*

L PDR*

NSIC*

PRC System*

LB#3 R/F

JLee*

ELicitra*

TNovak*

JSaltzman, SAB

OELD*

CMiles

HDenton

JRutberg

AToalston

WMiller, LFMB

RHeischman*

EJordan*

LHarmon*

DBrinkman

TBarnhart (4)*

IBailey



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

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

SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY

DOCKET NO. STN 50-528

PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

FACILITY OPERATING LICENSE

License No. NPF-34

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for license filed by Arizona Public Service Company, on behalf of itself and the 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), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's regulations set forth in 10 CFR Chapter I and all required notifications to other agencies or bodies have been duly made;
 - B. Construction of the Palo Verde Nuclear Generating Station, Unit 1 (facility) has been substantially completed in conformity with Construction Permit No. CPPR-141 and the application, as amended, the provisions of the Act and the regulations of the Commission;
 - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission (except as exempted from compliance in Section 2.D below);

- D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I (except as exempted from compliance in Section 2.D below);
 - E. Arizona Public Service Company* is technically qualified to engage in the activities authorized by this license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - F. The licensees have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;
 - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;
 - H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this Facility Operating License No. NPF-34 subject to the conditions for protection of the environment set forth in the Environmental Protection Plan attached as Appendix B, is in accordance with 10 CFR Part 51, of the Commission's regulations and all applicable requirements have been satisfied; and
 - I. The receipt, possession, and use of source, byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.
2. Based on the foregoing findings, the Initial Decision issued by the Atomic Safety and Licensing Board dated December 30, 1982, and the Decision issued by the Atomic Safety and Licensing Appeal Board dated February 15, 1983 (ALAB-713), regarding this facility, Facility Operating License No. NPF-34 is hereby issued to the 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) to read as follows:

*Arizona Public Service Company is authorized to act as agent for 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 and has exclusive responsibility and control over the physical construction, operation and maintenance of the facility.

- A. This license applies to the Palo Verde Nuclear Generating Station, Unit 1, a pressurized water reactor and associated equipment (facility) owned by the licensees. The facility is located on the licensees' site in Maricopa County, Arizona and is described in the licensees' Final Safety Analysis Report, as supplemented and amended through Amendment No. 13, and as further amended as described in a letter by Arizona Public Service Company, ANPP-31536, dated December 19, 1984; in the related CESSAR Final Safety Analysis Report, as supplemented and amended through Amendment No. 8, and in their Environmental Report, as supplemented and amended through Supplement No. 4.
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
- (1) Pursuant to Section 103 of the Act and 10 CFR Part 50, 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 to possess, and Arizona Public Service Company (APS) to use and operate the facility at the designated location in Maricopa County, Arizona, in accordance with the procedures and limitations set forth in this license;
 - (2) Pursuant to the Act and 10 CFR Part 70, APS to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the licensees' Final Safety Analysis Report, as supplemented and amended through Amendment No. 13 and the CESSAR Final Safety Analysis Report as supplemented and amended through Amendment No. 8;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, APS to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (4) Pursuant to the Act and 10 CFR Part 30, 40 and 70, APS to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, APS to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

- C. This license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

Arizona Public Service Company (APS) is authorized to operate the facility at reactor core power levels not in excess of 3800 megawatts thermal (100% power) in accordance with the conditions specified herein and in Attachment 1 to this license. The pre-operational tests, startup tests and other items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license. Pending Commission approval, this license is restricted to power levels not to exceed 5 percent of full power (190 megawatts thermal).

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated into this license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) Antitrust Conditions

This license is subject to the antitrust conditions delineated in Appendix C to this license.

(4) Operating Staff Experience Requirements

One week prior to initial criticality, APS shall have operators on each shift who meet the requirements described in Attachment 2. Attachment 2 is hereby incorporated into this license.

(5) Initial Test Program (Section 14, SER and SSER 2)*

APS shall conduct the post-fuel loading initial test program set forth in Section 14 of the FSARs (Palo Verde and CESSAR), as amended. Changes to this program, as defined below, and the basis for such changes, including 10 CFR 50.59 evaluations, must be submitted for NRC review one week prior to making such changes.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

- (a) Elimination of any safety-related test*
 - (b) Modification of objectives, test methods, or acceptance criteria for any safety-related test
 - (c) Performance of any safety-related test at a power level different from that stated in the FSAR by more than 5 percent of rated power
 - (d) Failure to satisfactorily complete the entire initial startup test program by the time core burnup equals 200 effective full power days
 - (e) Deviation from initial safety-related test program administrative procedures or quality assurance controls described in the FSAR
 - (f) If continued power operation is desired during a delay in the test program in excess of 30 days (14 days if power level exceeds 50 percent), APS shall provide justification that adequate testing has been performed and evaluated to demonstrate that the facility can be operated at the planned power level with reasonable assurance that the health and safety of the public will not be endangered.
- (6) Environmental Qualification (Section 3.11, SSER 7)
- (a) Prior to November 30, 1985, APS shall environmentally qualify all electrical equipment according to the provisions of 10 CFR 50.49.
 - (b) Prior to initial entrance into Mode 3, APS shall make modifications to the Target Rock solenoid valves to ensure their environmental qualification.
 - (c) Prior to initial criticality, APS shall confirm that RTD's, Valcor solenoid valves, temperature elements, and ITT Barton transmitters are qualified in accordance with 10 CFR 50.49.
- (7) Fire Protection Program (Section 9.5.1, SSER 6 and SSER 7)
- (a) APS shall maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility through Amendment No. 13, and further amended by APS letter, ANPP-31536, dated December 19, 1984, and as provided in the SER through Supplement 7, subject to provisions (b) & (c) below.

*Safety-related tests are those tests which are conducted for the purpose of verifying the design, construction, and operation of safety-related systems, structures, and equipment.

- (b) APS may make no change in features of the approved fire protection program which would decrease the level of fire protection in the plant without prior approval of the Commission. To make such a change APS must submit an application for license amendment pursuant to 10 CFR 50.90.
- (c) APS may make changes to features of the approved fire protection program which do not decrease the level of fire protection without prior Commission approval, provided:
 - (i) such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59), and
 - (ii) such changes do not result in failure to carry out the fire protection program approved by the Commission prior to license issuance.

APS shall maintain, in an auditable form, a current record of all such changes including an analysis of the effects of the change on the fire protection program and shall make such records available to NRC inspectors upon request. All changes to the approved program made without prior Commission approval shall be reported annually to the Director of the Office of Nuclear Reactor Regulation, together with supporting analyses.

(8) Inadequate Core Cooling Instrumentation System (Section 22.2 II.F.2, SSER 6)

Prior to initial criticality, APS shall revise the emergency operating procedures to resolve staff comments in SSER 6 on the use of the reactor vessel level monitoring system. Prior to exceeding 5 percent of full power, APS shall submit a report for the ICCI system as described in Appendix D to SER Supplement No. 6.

(9) Emergency Preparedness

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of preparedness, the provisions of 10 CFR Section 50.54(s)(2) will apply.

(10) Results of Piping Vibration Test Program (Section 3.9.2, SER)

Three months following completion of the piping vibration test program performed during initial startup, APS shall submit a summary of the results which demonstrate that the vibration of piping systems is within acceptable levels.

(11) Initial Inservice Inspection Program (Sections 5.2.4 and 6.6, SER)

Prior to July 1, 1987, APS shall submit the initial inservice inspection program for staff approval.

(12) Auxiliary Feedwater Pump Flood Protection (Section 9.3.3, SSER 7)

Prior to initial criticality, APS shall have installed and satisfactorily tested the auxiliary feedwater pump compartments flood protection seals.

(13) Guide Tube Wear Surveillance (Section 4.2.5, SSER 2)

Prior to July 1, 1987, APS shall submit the details of the fuel assembly guide tube fretting wear inspection program for staff review and approval, and perform the approved program during the first refueling outage.

(14) Fuel Rod Growth (Section 4.2.4, SSER 5)

Prior to entering Startup (Mode 2) after each refueling, APS shall either provide a report that demonstrates that the existing fuel element assemblies (FEA) have sufficient available shoulder gap clearance for at least the next cycle of operation, or identify to the NRC and implement a modified FEA design that has adequate shoulder gap clearance for at least the next cycle operation. This requirement will apply until the NRC concurs that the shoulder gap clearance provided is adequate for the design life of the fuel.

(15) Loose Parts Monitoring System (Section 4.4.1, SSER 5)

Three months following completion of the start-up tests, system calibration, and establishment of the alert level for the loose parts monitoring system, APS shall submit a report for the system, as described in SSER 5.

(16) Response to Salem ATWS Event (Section 7.2, SSER 7)

APS shall submit responses and implement the requirements of Generic Letter 83-28 on a schedule which is consistent with that given in its letters dated November 3, 1983, October 9 and December 18, 1984.

(17) Post Accident Sampling System (Section 22.2, SSER 7)

Prior to exceeding 5 percent of full power, APS shall install and have operable a Post Accident Sampling System which meets the provisions of NUREG 0737 (II.B.3).

(18) Seismic Qualification and Pump and Valve Operability (Section 3.10, SSER 7)

- (a) Prior to initial entrance into Mode 3, APS must complete the operability qualification of the Anchor Darling air operated valves identified in section 3.10.1 of SSER 7.
- (b) Prior to initial criticality, APS shall complete the operability qualification of the atmospheric dump valves, the Q-Class check valves, the containment sump return check valves, and the excess flow check valves identified in section 3.10.1 of SSER 7.
- (c) Prior to initial criticality, APS shall complete the seismic qualification of the two remote shutdown panels and the four temperature elements identified in Section 3.10.1 of SSER 7.

(19) Supplement No. 1 to NUREG-0737 Requirements

APS shall complete the emergency response capabilities as required by Attachment 3.

(20) Radiochemistry Laboratory (Section 7.3.1.5(3), Emergency Plan)

APS shall maintain and operate the Palo Verde, Unit 2 radio-chemistry laboratory as part of the Palo Verde, Unit 1 facility under this Part 50 license authorization, in accordance with the commitments made in their letter ANPP-30937, dated October 24, 1984, until the Unit 2 facility is issued a Part 50 license.

(21) Revised Chapter 15 Analyses (Section 15, SSER 7)

Prior to initial criticality, APS shall submit, for staff review and approval, a schedule showing those Chapter 15 safety analyses that will be reanalyzed to account for the reduced system performance described in SSER 7, Section 15. These analyses should conform to the categorization described in SSER 7, Section 15.

(22) Pressurizer Safety Valves (Section 5.4, SSER 7)

Prior to initial criticality, APS shall establish the acceptability of increased blowdown of the pressurizer safety valves for power operation.

(23) Chemistry Control and Sampling Systems (Section 9.3, SSER 7)

By February 1, 1985, APS shall provide details for staff review on: (1) the type of material used in the hydrazine transfer line in the containment spray system; (2) the pressure for relief protection in Nuclear Sampling System; (3) the water chemistry limits for the reactor coolant makeup water, the primary coolant water, the steam generator secondary water, the feedwater, condensate, and the demineralizer effluent in the reactor makeup water system.

- D. The facility requires an exemption from Paragraph III.D.2(b)(ii) of Appendix J to 10 CFR Part 50 (Section 6.2.6, SSER 7). This exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. This exemption is, therefore, hereby granted pursuant to 10 CFR 50.12. With the granting of this exemption, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the ACT, and the rules and regulations of the Commission.
- E. APS shall fully implement and maintain in effect all provisions of the Commission approved physical security, guard training and qualification, and safeguards contingency plans, including amendments made pursuant to the authority of 10 CFR 50.54(p). The approved plans, which contain Safeguards Information as described in 10 CFR 72.21, are collectively entitled "Palo Verde Nuclear Generating Station Security Plan" Amendment 4, dated March 1983 (transmittal letter dated August 15, 1983) including a Chapter 8 contingency plan, (Note: The August 1983 submittal of Amendment 4 replaces all previous submittals to become the document of record) Amendment 5 dated September 1983 (transmittal letter dated December 2, 1983), Amendment 6 dated March 1984 (transmittal letter dated June 7, 1984), and Amendment 7 dated October 1984 (transmittal letter dated November 15, 1984), and "Palo Verde Nuclear Generating Station Training and Qualification Plan" dated February 1, 1980, as revised November 20, 1981, Revision 3 dated September 1984 (transmittal letter dated October 1, 1984), and Revision 4 dated November 1984 (transmittal letter dated December 7, 1984).
- F. APS shall report any violations of the requirements contained in Section 2 Items C.(1), C.(3) through C.(23) of this license. The initial notification shall be made within 24 hours in accordance with the provisions of 10 CFR 50.72 with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73(b), (c) and (e);
- G. The licensees shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims; and

H. This license is effective as of the date of issuance and shall expire at midnight on December 31, 2024.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:

1. Attachment 1
2. Attachment 2 -
Operating Staff Experience Requirements
3. Attachment 3 - Emergency Response
Capabilities
4. Appendix A -
Technical Specifications
5. Appendix B -
Environmental Protection Plan
6. Appendix C -
Antitrust Conditions

Date of Issuance: **DEC 31 1984**

ATTACHMENT 1

PALO VERDE UNIT 1 OPERATING LICENSE NPF-34

This attachment identifies items which must be completed to the NRC staff's satisfaction in accordance with the schedules identified below.

1. Surveillance Program

Prior to entering any operational mode for the first time, including initial fuel loading, APS shall:

- a. Have completed a review of the surveillance procedures applicable to the change of mode, and determined that the procedures demonstrate the operability of the required systems with respect to all acceptance criteria defined in the Technical Specifications.
- b. Have dispatched written certification to the NRC Regional Administrator, Region V, that the actions defined in (a), above, have been completed for the mode or modes to be entered.

2. The following items must be completed prior to entering Mode 6:

- a. Complete All Safety-Related Rework Identified as a Result of the Reinspection of Instruments discussed in DER 84-27 and 84-21.
- b. Install correct pipe plugs as described in Construction Deficiency Report (DER 84-48) on NAMCO limit switches to ensure operable control room valve position indication.
- c. Complete the installation of the 29 supports for the Fire Protection sprinkler system to achieve conformance with the design drawings (Fire Protection Seismic Supports FP-0000I00).
- d. Complete action required by Construction Deficiency Report (DER 84-101) to ensure containment purge valve operability.

3. The following items must be completed prior to initial entry into Mode 4:

a. Shock Suppressors (Snubbers)

The licensee shall replace all damaged size #1/4 and #1/2 pipe shock suppressors (Snubbers) and install low friction slide plates in critical positions located in the Chemical and Volume Control System, the Main Steam Supply System, and the Auxiliary Feedwater System (as indicated in Construction Deficiency Report DER 84-64).

b. Anchor/Darling Swing Check Valves

The licensee shall inspect and repair all Anchor/Darling swing check valves for missing tack welds and loose set screws as described in Construction Deficiency Report (DER 84-102).

c. Base Flange Resistors for Atmospheric Dump Valves

The licensee shall modify all base flange resistors for atmospheric dump valves as described in Construction Deficiency Report (DER 84-52).

4. The following item must be completed prior to entering Mode 2:

a. Threaded Fasteners Maintenance Procedures

The licensee shall develop and implement maintenance procedures for threaded fastener practices, including Reactor Coolant Pump Flanges, Steam Generator Manways, Pressurizer Manways, and Pressurizer Safety Valve Flanges, as discussed in IE Bulletin 82-02.

ATTACHMENT 2

Palo Verde Nuclear Generating Station, Unit 1
Operating License NPF-34Operating Staff Experience Requirements

APS shall have a licensed senior operator on each shift who has had at least six months of hot operating experience on a same type plant including at least six weeks at power levels greater than 20% of full power, and who has had startup and shutdown experience. For those shifts where such an individual is not available on the plant staff, an advisor shall be provided who has had at least four years of power plant experience, including two years of nuclear plant experience, and who has had at least one year of experience on shift as a licensed senior operator at a similar type facility. Use of advisors who were licensed only at the RO level will be evaluated on a case-by-case basis. Advisors shall be trained on plant procedures, technical specifications and plant systems, and shall be examined on these topics at a level sufficient to assure familiarity with the plant. For each shift, the remainder of the shift crew shall be trained in the role of the advisors. The training of the advisors and remainder of the shift crew shall be completed prior to initial criticality. Two weeks prior to initial criticality, APS shall certify to the NRC the names of the advisors who have been examined and have been determined to be competent to provide advice to the operating shifts. These advisors, or fully trained and qualified replacements shall be retained until the experience levels identified in the first sentence above have been achieved. Any replacement advisors shall be certified by APS prior to these individuals being placed on shift. The NRC shall be notified at least 30 days prior to the date APS proposes to release the advisors from further service.

ATTACHMENT 3

EMERGENCY RESPONSE CAPABILITIES

APS shall complete the following requirements of NUREG-0737 Supplement #1 on the schedule noted below:

- (a) Three months after the staff issues its evaluation of Revision 2 to the CE Owners Group emergency procedure guidelines (CEN-152), dated May 8, 1984, APS shall provide a schedule for revising (i) the Procedure Generation Package to be in conformance with Revision 2 to CEN-152, as modified by the staff's evaluation, and (ii) the emergency operating procedures to be in conformance with the revised Procedure Generation Package.
- (b) Prior to exceeding 5 percent of full power, APS shall implement actions to correct HEDs A-3.1, 173, 151A, 152A, 154A, 158A, 161A, 163A, 164A, 159B, 165A, 166A, and 153A as described in its submittal of October 29, 1984.
- (c) Prior to August 31, 1985, APS shall submit for review and approval a Supplemental DCRDR Summary Report which provides information described in SSER 7.
- (d) Prior to startup following the first refueling outage, APS shall implement actions to correct HEDs A-5.14, A-5.9, B-5.9, B-5.14 and deferred HEDs A-1.2, A-1.3, 64, 100, 101b, 138, 172, and A-5.16 as described in APS letter of October 29, 1984.
- (e) By February 28, 1985, APS shall submit a safety analysis for the safety parameter display system (Item I.D.2) which includes the bases for parameter selection. The system shall not be used by the operators until the staff has approved its use.
- (f) By May 31, 1985, APS shall implement the provisions of Regulatory Guide 1.97, Revision 2, as described in the APS letters August 1, 1984, and December 5, 1984.
- (g) By June 28, 1985, APS shall have installed, tested and made functional the Chemical and Radiological Analysis Computer System which is the primary system to be used for post accident dose assessment.



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

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. STN 50-528

PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

ARIZONA PUBLIC SERVICE COMPANY, ET AL

NOTICE OF ISSUANCE OF FACILITY OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission), has issued Facility Operating License No. NPF-34, (License) 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. This License authorizes operation of the Palo Verde Nuclear Generating Station, Unit 1 (facility) at reactor core power levels not in excess of 3800 megawatts thermal in accordance with the provisions of the License, the Technical Specifications and the Environmental Protection Plan. However, the License contains a condition currently limiting operation to five percent of full power (190 megawatts thermal). Authorization to operate at greater than five percent power will require specific Commission approval.

Palo Verde Nuclear Generating Station, Unit 1 is a pressurized water reactor which utilizes a CESSAR standard plant design and is located at the licensees' site in Maricopa County, Arizona approximately 36 miles west of the city of Phoenix. The License is effective as of the date of issuance and shall expire at midnight on December 31, 2024.

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The application for the license complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act); and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the License. Prior public notice of the overall action involving the proposed issuance of an operating license was published in the FEDERAL REGISTER on July 11, 1980 (45 F.R. 46941) as clarified in a notice published July 25, 1980 (45 F.R. 49732). The issuance of the operating license was approved by the Atomic Safety and Licensing Board in its Initial Decision, dated December 30, 1982.

The Commission has determined that the issuance of this license will not result in any environmental impacts other than those evaluated in the Final Environmental Statement since the activity authorized by the license is encompassed by the overall action evaluated in the Final Environmental Statement.

For further details with respect to this action, see (1) Facility Operating License No. NPF-34, with Technical Specifications (NUREG-1111) and Environmental Protection Plan; (2) the report of the Advisory Committee on Reactor Safeguards dated December 15, 1981; (3) the Commission's Safety Evaluation Report on Palo Verde dated November 1981; Supplement Nos. 1 through 7, dated February 1982, May 1982, September 1982, March 1983, November 1983, October 1984, and December, 1984, respectively; (4) the Commission's related Safety Evaluation Report on CESSAR dated November 1981; Supplement No. 1 dated March 1983; Supplement No. 2 dated September 1983; (5) the Final Safety Analysis Reports and amendments thereto; (6) the Environmental Report and supplements thereto; (7) the Draft Environmental Statement dated October 1981; and (8) the Final Environmental Statement dated March 1982.

These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and the Phoenix Public Library, Business, Science and Technology Department, 12 East McDowell Road, Phoenix, Arizona 85004. A copy of Facility Operating License No. NPF- may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing. Copies of the Safety Evaluation Report and its Supplements 1 through 7 (NUREG-0857) and the Final Environmental Statement (NUREG-0841) may be purchased at current rates from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161, and through the NRC GPO sales program by writing the U. S. Nuclear Regulatory Commission, Attention: Sales Manager, Washington, D. C. 20555. GPO deposit account holders can call 301-492-9530.

Dated at Bethesda, Maryland, the 31st day of December, 1984.

FOR THE NUCLEAR REGULATORY COMMISSION


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

ASSESSMENT OF THE EFFECT OF LICENSE DURATION ON THE MATTERS DISCUSSED
IN THE FINAL ENVIRONMENTAL STATEMENT FOR THE
PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2 AND 3

INTRODUCTION

The Final Environmental Statement (FES) for the operation of the Palo Verde Nuclear Generating Station, Units 1, 2 and 3 (PVNGS 1-3) was published in February 1982. At that time it was staff practice to issue operating licenses for a period of 40 years from the date of issuance of the construction permit. This was approximately 30 years of operating life.

However, since the applicants have requested in their application that the operating licenses (OL) for PVNGS 1-3 then under consideration by the staff, have a duration of 40 years from the date of OL issuance, an assessment contained herein is made for those issues affected by the 40-year duration.

DISCUSSION

The staff reviewed the PVNGS 1-3 FES to determine which aspects considered in the FES are affected by the duration of the operating license. In general, the FES assesses various impacts associated with operation of the facility in terms of annual impacts and balances these against the anticipated annual energy production benefits. Thus, the overall assessment and conclusions would not be dependent on specific operating life. There are, however, two areas in which a specific operating life was assumed. These are as follows:

1. Radiological assessment are based on a 15-year plant midlife.
2. Uranium fuel cycle impacts are based on 30 years of operation.

EVALUATION

The staff's appraisal of the significance of the use of 40 years of operations rather than 30 as it affects the two areas above is presented in the following discussions:

1. Radiological Assessment - The NRC staff calculated dose commitments to the human population residing around nuclear power reactors to assess the impact on people from radioactive material released from these reactors. The annual dose commitment is calculated to be the dose that would be received over a 50-year period following the intake of radioactivity for one year under the conditions that would exist 15 years after the plant began operation.

The 15-year period is chosen as representing the midpoint of plant operation and is incorporated into the dose models by allowing for buildup of long life radionuclides in the soil. It affects the estimated doses only for radionuclides ingested by humans that have half-lives greater than a few years. For a plant licensed for 40 years, increasing the buildup period

from 15 to 20 years would increase the dose from long life radionuclides via the ingestion pathways by 10% at most. It would have much less effect on dose from shorter life radionuclides. Table C-4 of the PVNGS 1-3 FES indicates that the estimated doses via the ingestion pathways are well below the regulatory design objectives. For example, the ingestion dose to the thyroid from PVNGS Unit 1 is 1.8 mrem/yr compared to an Appendix I design objective of 15 mrem/yr. Thus, an increase of even as much as 10% in these pathways would remain well below the Appendix I guidelines and would not be significant.

2. Uranium Fuel Cycle Impacts - The impacts of the uranium fuel cycle are based on 30 years of operation of a model LWR. The fuel requirements for the model LWR are assumed to be one initial core load and 29 annual refuelings (approximately 1/3 core). The annual fuel requirement for the model LWR averaged out over a 40-year operating life (1 initial core and 39 refuelings of approximately 1.3 core) would be reduced slightly as compared to the annual fuel requirement averaged for a 30-year operating life.

The net result would be approximately 1.5% reduction in the annual fuel requirement for the model LWR. This small reduction in fuel requirements would not lead to significant changes in the impacts of the uranium fuel cycle. The staff judges that there would not be any changes to PVNGS 1-3 FES Table 5.16 (S-3) that would be necessary in order to consider 40 years of operation. If anything, the value in Table 5.16 become more conservative when a 40-year period of operation is considered.

CONCLUSIONS

The staff has reviewed the PVNGS 1-3 FES and determined that only two of the areas related to its NEPA analysis discussed in the statement were tied directly to a 30-year operating period. Based on the reasons discussed in the sections above, the staff has concluded that the impacts associated with a 40-year license duration are not significantly different from those associated with a 30-year license duration and are not significantly different from those assessed in the PVNGS 1-3 FES.

UNITED STATES NUCLEAR REGULATORY COMMISSIONARIZONA PUBLIC SERVICE COMPANY, ET. AL.DOCKET NO.: STN 50-528NOTICE OF ENVIRONMENTAL ASSESSMENT ANDFINDING OF NO SIGNIFICANT IMPACT

The U. S. Nuclear Regulatory Commission (the Commission) is considering issuance of a partial exemption from the requirements of Appendix A and Appendix J to 10 CFR Part 50 to the Arizona Public Service Company, Salt River Project Agricultural Improvement and Power District, El Paso Electric Company, Southern California Edison Company, Public Service Company of Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority (the applicants) for the Palo Verde Nuclear Generating Station, Unit 1 located at the applicants' site in Maricopa County, Arizona.

ENVIRONMENTAL ASSESSMENT:

Identification of Proposed Action: The exemption from Appendix A would delay until initial criticality the sealing of piping penetrations that would provide flood protection for the auxiliary feedwater pumps. The exemption from Appendix J would eliminate the full pressure test required by paragraph III.D.2(b)(ii) and substitute a seal leakage test to be conducted at a pressure specified in the Technical Specifications. The proposed exemptions are in accordance with the applicants' letters dated December 5, 1984 and December 13, 1984, respectively.

The Need for the Proposed Action: The proposed Appendix A exemption would allow the applicant to load fuel and conduct tests on schedule. The proposed Appendix J exemption is required to provide the applicant with greater plant availability over the lifetime of the plant.

Environmental Impacts of the Proposed Action: The proposed Appendix A exemption delays until initial criticality the sealing of piping penetrations that would provide flood protection for the auxiliary feedwater pumps. Since there is no decay heat prior to initial criticality that would require the use of the auxiliary feedwater system, there is no environmental impact. The proposed exemption grants the substitution of an airlock seal test for an airlock pressure test while the reactor is in a shutdown or refueling mode. With respect to this exemption from Appendix J, the increment of environmental impact is related solely to the potential increased probability of containment leakage during an accident. This could lead to higher offsite and control room doses. However, this potential increase is very small, due to the added seal leakage tests and the protection against excessive leakage afforded by the other tests required by Appendix J.

Alternative to the Proposed Action: Because the staff has concluded that there is no measurable environmental impact associated with the proposed exemptions, any alternative to these exemptions will have either no environmental impact or greater environmental impact.

The principal alternative would be to deny the requested exemptions. This would not reduce environmental impacts of plant operations and would result in reduced operational flexibility and unwarranted delays in power ascension.

Alternative Use of Resources: This action does not involve the use of resources not previously considered in connection with the "FES Related to the Operation of Palo Verde Nuclear Generating Station Station, Units 1, 2 and 3," dated February 1982.

Agencies and Persons Consulted: The NRC staff reviewed the applicants' request that supports the proposed exemptions. The NRC staff did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed exemptions.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the letters dated December 5, 1984 and December 13, 1984, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Phoenix Public Library, Business, Science and Technology Department, 12 East McDowell Road, Phoenix, Arizona 85004.

Dated at Bethesda, Maryland, this 19 day of December 1984.

FOR THE NUCLEAR REGULATORY COMMISSION



A. Schwencer, Acting Assistant Director
for Licensing
Division of Licensing
Office of Nuclear Reactor Regulation



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

Docket No. 70-2949

AMENDMENT TO INDEMNITY AGREEMENT NO. B-95
AMENDMENT NO. 2

Effective **DEC 31 1984**, Indemnity Agreement No. B-95 between Arizona Public Service Company, Southern California Edison Company, Salt River Project Agricultural Improvement and Power District, Public Service Company of New Mexico, El Paso Electric Company and Southern California Public Power Authority and the U. S. Nuclear Regulatory Commission, dated January 26, 1983, as amended, is hereby further amended as follows:

"The following named licensee is added to the Indemnity Agreement:

"Los Angeles Department of Water and Power"

FOR THE NUCLEAR REGULATORY COMMISSION


Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted _____, 1984

By _____
ARIZONA PUBLIC SERVICE COMPANY

Accepted _____, 1984

By _____
SALT RIVER PROJECT AGRICULTURAL
IMPROVEMENT AND POWER DISTRICT

Accepted _____, 1984

By _____
EL PASO ELECTRIC COMPANY

Accepted _____, 1984

By _____
LOS ANGELES DEPARTMENT OF
WATER AND POWER

Accepted _____, 1984

By _____
SOUTHERN CALIFORNIA EDISON CO.

Accepted _____, 1984

By _____
PUBLIC SERVICE COMPANY
OF NEW MEXICO

Accepted _____, 1984

By _____
SOUTHERN CALIFORNIA PUBLIC POWER
AUTHORITY



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

Docket No. 50-528

AMENDMENT TO INDEMNITY AGREEMENT NO. B-95
AMENDMENT NO. 3

Effective **DEC 31 1984**, Indemnity Agreement No. B-95, between Arizona Public Service Company, Southern California Edison Company, Salt River Project Agricultural Improvement and Power District, Public Service Company of New Mexico, El Paso Electric Company, Southern California Public Power Authority, Los Angeles Department of Water and Power and the U.S. Nuclear Regulatory Commission, dated January 26, 1983, as amended, is hereby further amended as follows:

Item 2a. of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 2 - Amount of financial protection

- a. \$1,000,000 (From 12:01 a.m., January 26, 1983 to
12 midnight **DEC 30 1984**
inclusive)
- \$160,000,000* (From 12:01 a.m., **DEC 31 1984**)

Item 3 of the Attachment to the indemnity agreement is deleted in its entirety and the following substituted therefor:

Item 3 - License number or numbers

- SNM-1887 (From 12:01 a.m., January 26, 1983 to
12 midnight **DEC 30 1984**
inclusive)
- SNM-1922 (From 12:01 a.m., December 19, 1983)
- NPF-34 (From 12:01 a.m., **DEC 31 1984**)

* And, as of August 1, 1977, the amount available as secondary financial protection.

Item 5 of the Attachment to the indemnity agreement is amended by adding the following:

Nuclear Energy Liability Policy (Facility Form) No. MF-116 issued by Mutual Atomic Energy Liability Underwriters.

FOR THE NUCLEAR REGULATORY COMMISSION


Jerome Saltzman, Assistant Director
State and Licensee Relations
Office of State Programs

Accepted _____, 1984

Accepted _____, 1984

By _____
ARIZONA PUBLIC SERVICE COMPANY

By _____
SOUTHERN CALIFORNIA EDISON CO.

Accepted _____, 1984

Accepted _____, 1984

By _____
SALT RIVER PROJECT AGRICULTURAL
IMPROVEMENT AND POWER DISTRICT

By _____
PUBLIC SERVICE COMPANY OF
NEW MEXICO

Accepted _____, 1984

Accepted _____, 1984

By _____
EL PASO ELECTRIC COMPANY

By _____
SOUTHERN CALIFORNIA PUBLIC POWER
AUTHORITY

Accepted _____, 1984

By _____
LOS ANGELES DEPARTMENT OF
WATER AND POWER

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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PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

ENVIRONMENTAL PROTECTION PLAN
(NON-RADIOLOGICAL)

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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 Sub-section 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.

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.