Docket No.: 50-530

Mr. E. E. Van Brunt, Jr. Executive Vice President Arizona Nuclear Power Project Post Office Box 52034 Phoenix, Arizona 85072-2034

Dear Mr. Van Brunt:

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNIT 3 - ISSUANCE OF

FACILITY OPERATING LICENSE NO. NPF-74

The U. S. Nuclear Regulatory Commission has issued the enclosed Facility Operating License No. NPF-74 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 3 located in Maricopa County, Arizona.

License No. NPF-74 authorizes operation of the Palo Verde Nuclear Generating Station, Unit 3 at core power levels not to exceed 3800 megawatts thermal.

Also enclosed is a copy of a related <u>Federal Register</u> Notice, the original of which has been forwarded to the Office of the Federal Register for publication.

The Commission has also issued Supplement No. 12 to the Safety Evaluation Report related to operation of the Palo Verde Nuclear Generating Station. This supplement supports the issuance of Facility Operating License No. NPF-74. Two copies of Supplement No. 12 are enclosed. Additional copies will be sent to you.

Eight signed copies of Amendment No. 9 to Indemnity Agreement No. B-95, which covers the activities authorized under License No. NPF-74, are also enclosed. Please have each licensee sign all copies and return one copy of the amendment to this office.

Sincerely,

Dennis M. Crutchfield, Director Division of Reactor Projects - III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

1. Facility Operating License No. NPF-74

Federal Register Notice
 Supplement No. 12 to SER (NUREG-0857)
 Amendment No. 9 to Indemnity Agreement No. B-95

cc: See next page

Eight signed copies of Amendment No. 9 to Indemnity Agreement No. B-95, which covers the activities authorized under License No. NPF-74, are also enclosed. Please have each licensee sign all copies and return one copy of the amendment to this office.

Sincerely,

original signed bу

Dennis M. Crutchfield, Director Division of Reactor Projects - III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

- 1. Facility Operating License No. NPF-74
- Federal Register Notice
 Supplement No. 12 to SER (NUREG-0857)
- 4. Amendment No. 9 to Indemnity Agreement No. B-95

cc: See next page

DISTRIBUTION:

Docket File 50-530	JSniezek
NRC	TMurley
Local PDR	DCrutchfield
PD5 Plant	DHagan
JLee (15)	EJordan
MDavis	JPartlow
EALicitra	TBarnhart (4)
IDintz	WJones
WLambe, PPAS	EButcher
OGC-Beth	ACRS (10)
JRutberg	GPA/PA
GWKnighton	ARM/LFMB
GHolahan	Region V (4)
FMiraglia	

*See previous concurrence

*DRSP/PD5 MDavis:cd 10/8/87	*DRSP/PD5 JLee 10/9/87	*PTSB WLambe/ 10/13/ B 7	*DTSB IDinitz 11/03/87	*0GC 10/20/87	*0GC JRutberg 10/21/87	
*ARM/PPMB	*DRSP/D:PD5	AD/DKSP	DORSON	11/7	Ak	NRR
AThomas	GWKnighton	GHolahan	DCRutchf		Aglia	TMMuy
11/03/87	11/20/87	11/3/87	11/24/87		187	112

Mr. E. E. Van Brunt, Jr. Arizona Nuclear Power Project

cc: Arthur C. Gehr, Esq. Snell & Wilmer 3100 Valley Center Phoenix, Arizona 85073

Mr. James M. Flenner, Chief Counsel Arizona Corporation Commission 1200 West Washington Phoenix, Arizona 85007

Charles R. Kocher, Esq. Assistant Council James A. Boeletto, Esq. Southern California Edison Company P. O. Box 800 Rosemead, California 91770

Mr. Mark Ginsberg
Energy Director
Office of Economic Planning
and Development
1700 West Washington - 5th Floor
Phoenix, Arizona 85007

Mr. Wayne Shirley Assistant Attorney General Bataan Memorial Building Santa Fe, New Mexico 87503

Mr. Jay Ball U.S. Nuclear Regulatory Commission P. O. Box 239 Arlington, Arizona 85322

Regional Administrator, Region V U. S. Nuclear Regulatory Commission 1450 Maria Lane Suite 210 Walnut Creek, California 94596

Palo Verde

Kenneth Berlin, Esq. Winston & Strawn Suite 500 2550 M Street, NW Washington, DC 20037

Ms. Lynne Bernabei Government Accountability Project of the Institute for Policy Studies 1901 Que Street, NW Washington, DC 20009

Mr. Ron Rayner P. O. Box 1509 Goodyear, AZ 85338

Mr. Charles B. Brinkman, Manager Washington Nuclear Operations Combustion Engineering, Inc. 7910 Woodmont Avenue Suite 1310 Bethesda, Maryland 20814

Mr. Bruce Blanchard
Environmental Projects Review
U.S. Department of the Interior
18th & C Streets, N.W. - Room 4256
Washington, D.C. 20240

Chairman Arizona Corporation Commission Post Office Box 6019 Phoenix, Arizona 85003

Arizona Radiation Regulatory Agency ATTN: Ms. Clara Palovic, Librarian 4814 South 40 Street Tempe, Arizona 85040

Defense Mapping Agency Aerospace Center (ADL) St. Louis Air Force Station, Missouri 63116

Regional Radiation Representative U.S. Environmental Protection Agency Region IX 215 Fremont Street San Francisco, California 94105

Chairman
Maricopa County Board of Supervisors
111 South Third Avenue
Phoenix, Arizona 85003

Mr. Charles Tedford, Director Arizona Radiation Regulatory Agency 4814 South 40 Street Phoenix, Arizona 85040 **DISTRIBUTION** DOCKET FILE NRC & Local PDRs PD V Reading T. Murley F. Miraglia DMCrutchfield GMHolahan *JLee *GKnighton MLicitra **MDavis** DNash, PTSB IDinitz, PTSB *OGC-Bethesds Antitrust Lawyer, OGC *Hearing Layer, ÓGC WLambe, PTSB GPA/PA ARM/LFMB *EJordan *DHagan *EButcher *JPartlow *TBarnhart (4 cys for each Docket *IBaily ACRS (10)

*WITH TECHNICAL SPECIFICATION & SSER (NUREG1287 & NUREG-0857, SUPP 12)



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 50-530

PALO VERDE NUCLEAR GENERATING STATION, UNIT 3

FACILITY OPERATING LICENSE

License No. NPF-74

- 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 3 (facility) has been substantially completed in conformity with Construction Permit No. CPPR-143 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);

8712210136 871125 PDR ADOCK 05000530 PDR

- E. Arizona Public Service Company* is technically qualified to engage in the activities authorized by this operating 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 after considering available alternatives, the issuance of this Facility Operating License No. NPF-74, 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. Pursuant to approval by the Nuclear Regulatory Commission at a meeting held on November 25, 1987, the license for fuel loading and low power testing, License No. NPF-65, issued on March 25, 1987, is superseded by Facility Operating License No. NPF-74 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:
 - A. This license applies to the Palo Verde Nuclear Generating Station, Unit 3, 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; 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.

^{*}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.

- 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, 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, as 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 Parts 30, 40, and 70, APS to receive, possess, and use in amounts 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 items identified in Attachment 1 to this license shall be completed as specified. Attachment 1 is hereby incorporated into this license.

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

Any changes in the initial test program described in Section 14 of the FSARs (Palo Verde and CESSAR) made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

D. APS has previously been granted an exemption from Paragraph III.D.2(b)(ii) of Appendix J to 10 CFR Part 50. This exemption was previously granted in Facility Operating License NPF-65 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 physical security, guard training and qualification, and safeguards contingency plans previously approved by the Commission and all amendments and revisions to such plans made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). By letter dated December 26, 1986, APS has incorporated Palo Verde Unit 3 into the previously approved plans. The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Palo Verde

Nuclear Generating Station Security Plan," with revisions submitted through March 10, 1987, including a Chapter 8 Contingency Plan, and "Palo Verde Nuclear Generating Station Guard Training and Qualification Plan," with revisions submitted through December 7, 1984.

F. APS shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility, as supplemented and amended, and as approved in the SER through Supplement 11, subject to the following provision:

APS may make changes to the approved fire protection program without approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- G. Except as otherwise provided in the Technical Specifications or the Environmental Protection Plan, APS shall report any violations of the requirements contained in Section 2.C of this license in the following manner: Initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System, with written follow-up within 30 days in accordance with the procedures described in 10 CFR 50.73(b), (c), and (e);
- H. 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
- I. This license is effective as of the date of issuance and shall expire at midnight on March 25, 2027.

FOR THE NUCLEAR REGULATORY COMMISSION

Thomas E. Murley, Director

Office of Nuclear Reactor Regulation

Attachments:

1. Attachment 1

2. Appendix A -

Technical Specifications

3. Appendix B -

Environmental Protection Plan

4. Appendix C -

Antitrust Conditions

Date of Issuance: November 25, 1987

ATTACHMENT 1

PALO VERDE NUCLEAR GENERATING STATION, UNIT 3 OPERATING LICENSE NPF-74

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

- 1. Prior to entering Mode 1 for the first time, 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 the respect to all acceptance criteria defined in the Technical Specifications.
 - b. Have dispatched written notification to the NRC Regional Administrator, Region V, that the action defined in (a), above, has been completed for Mode 1.
- 2. The post accident sampling system shall be operable prior to exceeding 5% power.
- 3. APS shall implement an augmented vibration monitoring program for each of the four reactor coolant pumps that includes the following elements:
 - a. Every four hours, monitor and record vibration data on each of the four reactor coolant pumps.
 - b. On a daily basis, perform an evaluation of the pump vibration data obtained in a above, by using an appropriately qualified engineering individual.
 - c. When any one vibration monitor on the reactor coolant pumps indicates a vibration level of 8 mils or greater, the Nuclear Regulatory Commission shall be notified within four hours via the Emergency Notification System. In addition, when the vibration on any pump exceeds 8 mils due to a shaft crack or unknown cause, within four hours the affected pump shall have its orbit and spectra continuously monitored and evaluated by an appropriately qualified individual.
 - d. When any one vibration monitor on the reactor coolant pumps indicates a vibration level of 10 mils or greater, within one hour, initiate action to place the unit in at least HOT STANDBY within the next six hours, and at least COLD SHUTDOWN within the following 30 hours. In addition the affected pump shall be secured after entering HOT STANDBY.

On a daily basis a spectrum analysis shall be performed on the e. reactor coolant pump shaft vibration data and shall be evaluated for trends by using an individual qualified in that technique. The evaluation shall consist of comparing the running speed (1xRPM) and twice running speed (2xRPM) spectral components to limits computed from the baseline vibration. The limits shall be based on the lowest of: (a) 1.6 times the baseline value, (b) the mean plus three standard deviations, (c) 2 mils for the 2xRPM component, or (d) 6 mils for 1xRPM component. When the amplitude exceeds any limit, further analysis shall be performed. This analysis shall consist of an inspection of the amplitude versus time plots for a steadily increasing trend, and a review of other plant data which might explain the change in amplitude. If it is confirmed that the trend is not caused by plant or pump conditions unrelated to a shaft crack, the trend shall be extrapolated manually and/or by computer to predict the time at which the vibration is expected to reach 10 mils. If the projected time for reaching 10 mils is one week or less, within one hour, initiate action to place the Unit in at least HOT STANDBY within the next six hours and at least COLD SHUTDOWN within the following 30 hours. In addition the affected pump shall be secured after entering HOT STANDBY.

The Regional Administrator, Region V may relax or rescind, in writing, any of the above vibration monitoring conditions upon a showing by the licensees of good cause.

- 4. Within 90 days of the commencement of the Palo Verde Unit 2 first refueling outage, the licensee shall submit a report to the NRC concerning the inspection of the Unit 2 reactor coolant pumps. This report shall include inspection results, an evaluation of the Unit 1 and Unit 2 pump shaft degradation findings and proposed actions to be taken with respect to Unit 3 continued operation.
- 5. APS shall install modified reactor coolant pump shafts during the first refueling outage which include the modifications described in Figure DES-3 of the attachments to the licensees' November 5, 1987 letter.

In the event new limit methods are chosen, they shall be evaluated by the licensee to assure that the new methods are equal to or better than the above method. The Commission shall be advised within one week if new methods are chosen.

APPENDIX B

TO FACILITY OPERATNG LICENSES NO. NPF-41, NPF-51 AND NPF-74 PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3

ARIZONA PUBLIC SERVICE COMPANY, ET AL DOCKET NOS. STN 50-528, STN 50-529 AND STN 50-530

ENVIRONMENTAL PROTECTION PLAN (NON-RADIOLOGICAL)

NOVEMBER 1987

PALO VERDE NUCLEAR GENERATING STATION, UNITS, 1, 2 AND 3

ENVIRONMENTAL PROTECTION PLAN (NON-RADIOLOGICAL)

TABLE OF CONTENTS

Sect	ion																				Page
1.0	Objectives of the Environmental	Pi	rot	tec	:t	ior	ו ו	Pla	an				•								3
2.0	Environmental Protection Issues						•	•		•	•					•			•		4
2.1	Aquatic Issues	٠		•			•	•							•			•			4
2.2	Terrestrial Issues																				4
2.3	Cultural Resources Issues			•				•		•			•		•						4
3.0	Consistency Requirements	•	•			•	•	•	•	•	•			•	•	•	•	•	•	•	5
3.1	Plant Design and Operation	•		•	٠						•	•	•	•	•					•	5
3.2	Changes Required for Compliance	Wi	itl	n ()tl	her	٠ ا	En۱	٧i١	roi	nme	en	taʻ		₹eç	วน	la	ti	on:	s.	6
4.0	Environmental Conditions	٠		•				•		•			•							•	7
4.1	Unusual or Important Environmen	tal	1	ΞV€	en:	ts		•	•	•	•	٠			•					•	7
4.2	Environmental Monitoring					•		٠					•		•		•				7
5.0	Administrative Procedures	•						•	•					٠	•	•		٠	٠	•	9
5.1	Review and Audit	•			•						•	•			•	•				•	9
5.2	Records Retention	•							•						•			•			9
5.3	Changes in Environmental Protect	tic	n	PΊ	laı	n.									•	•	•	٠			9
5.4	Plant Reporting Requirements			•		•		•	•	•		•	•	•			٠	٠	•		9

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-CL.

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 impaction 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 May 17, 1985 from E. E. Van Brunt, Jr., Arizona Nuclear Power Project, to G. W. 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 satisfication 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 C

ANTITRUST CONDITIONS LICENSE NO. NPF-74

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

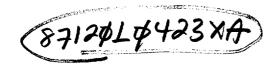
- 1. In connection with the antitrust conditions, the following definitions are used herein:
 - A. "Bulk Power" means the electric power, and any attendant energy, supplied or made available at transmission or subtransmission voltage by one entity to another.
 - B. "Entity" means a person, private or 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 cost 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.

DOCKET NO. STN 50-530 PALO VERDE NUCLEAR GENERATING STATION, UNIT 3 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-74 (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 3 (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. On March 25, 1987, the Commission issued Facility Operating License No. NPF-65, which authorized operation of Palo Verde Nuclear Generating Station, Unit 3 at power levels not in excess of 190 megawatts thermal. Facility Operating License No. NPF-74 supersedes Facility Operating License No. NPF-65.

Palo Verde Nuclear Generating Station, Unit 3 is a pressurized water reactor that utilizes a CESSAR standard plant design; it is located at the licensees' site in Maricopa County, Arizona approximately 36 miles west of the city of Phoenix.



The application for the license, as amended, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The issuance of this License has been authorized by the Atomic Safety and Licensing Board in its Initial Decision and Order dated December 30, 1982 and July 22, 1985, respectively; the Decision issued by the Atomic Safety and Licensing Appeal Board, dated February 15, 1983; and by the Commission at its meeting on November 25, 1987. 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 <u>Federal Register</u> on July 11, 1980 (45 FR 46941), as clarified in a notice published July 25, 1980 (45 FR 49732).

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-74, with Technical Specifications (NUREG-1287) 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, and Supplements 1 through 12, dated February 1982, May 1982, September 1982, March 1983, November 1983, October 1984, December 1984, May 1985, December 1985, April 1986, and March 1987, and November 1987, respectively; (4) the Commission's related Safety Evaluation Report on CESSAR dated November 1981, and Supplements 1 and 2, dated March and September 1983, respectively; (5) the Palo Verde Final Safety Analysis Report and amendments

thereto; (6) the Environmental Report and supplements thereto; (7) the NRC Draft Environmental Statement, dated October 1981; (8) the Final Environmental Statement, dated March 1982; and (9) the Initial Decision and Order Dismissing Proceeding issued by the Atomic Safety and Licensing Board, dated December 30, 1982, and July 22, 1985, respectively and the Decision issued by the Atomic Safety and Licensing Appeal Board, dated February 15, 1983.

These documents are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW, 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-74 may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Projects - III, IV, V and Special Projects. Copies of the Safety Evaluation Report and its Supplements 1 through 12 (NUREG-0857), the Final Environmental Statement (NUREG-0841), and the Technical Specifications (NUREG-1287) may be purchased by calling (202) 275-2060 or (202) 275-2171 or by writing to the Superintendent of Documents, U.S. Government Printing Office, Post Office Box 37082, Washington, D.C. 20013-7082. NUREG-0857 may also be purchased from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, the 25th day of November, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton, Director

Project Directorate 5

Division of Reactor Projects - III,

IV, V and Special Projects



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

Docket Nos.

50-528 50-529 50-530

AMENDMENT TO INDEMNITY AGREEMENT NO. B-95 AMENDMENT NO. 9

Effective November 25, 1987, 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 Angles Department of Water and Power and the Nuclear Regulatory Commission, dated January 26, 1983, as amended, is hereby further amended as follows:

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

Item 3 - License number or numbers

SNM-1887	(From 12:01 a.m., January 26, 1983,	to
	12:00 midnight, December 30, 1984	
	inclusive)	

- SNM-1922 (From 12:01 a.m., December 19, 1983, to 12:00 midnight, December 8, 1985 inclusive)
- SNM-1956 (From 12:01 a.m., January 22, 1986, to 12:00 midnight, March 24, 1987 inclusive)
- NPF-34 (From 12:01 a.m., December 31, 1984, to 12:00 midnight, May 31, 1985 inclusive)
- NPF-41 (From 12:01 a.m., June 1, 1985)
- NPF-46 (From 12:01 a.m., December 9, 1985, to 12:00 midnight, April 23, 1986 inclusive)
- NPF-51 (From 12:01 a.m., April 24, 1986)

NPF-65	(From 12:01 a.m., March 12:00 midnight Novembe inclusive)		to	
NPF-74	(From 12:01 a.m., Nove	mber 25, 198	37)	
	J.S. NUCLEAR REGULATORY	COMMISSION		
Policy De Support Program	Thomas, Acting Chief evelopment and Technical tranch Management, Policy Development Staff, NRR	opment		
Accepted		_, 1987	Accepted,	1 9 87
By ARIZON	NA PUBLIC SERVICE COMPANY	7 -	By SOUTHERN CALIFORNIA PUBLIC POWER	
Accepted		_, 1987	Accepted,	1987
By SOUTH	ERN CALIFORNIA EDISON COM	1PANY	By LOS ANGELES DEPARTMENT OF W AND POWER	ATER
Accepted		_ , 1987	Accepted,	1987
	RIVER PROJECT AGRICULTURA /EMENT AND POWER DISTRICT		By EL PASO ELECTRIC COMPANY	
Accepted	•	, 1987		

PUBLIC SERVICE COMPANY OF NEW MEXICO

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 condidered 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 comitments 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.

APPENDIX B

TO FACILITY OPERATNG LICENSES NO. NPF-41, NPF-51 AND NPF-65 PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3

ARIZONA PUBLIC SERVICE COMPANY, ET AL DOCKET NOS. STN 50-528, STN 50-529 AND STN 50-530

ENVIRONMENTAL PROTECTION PLAN (NON-RADIOLOGICAL)

MARCH 1987

PALO VERDE NUCLEAR GENERATING STATION, UNITS, 1, 2 AND 3

ENVIRONMENTAL PROTECTION PLAN (NON-RADIOLOGICAL)

TABLE OF CONTENTS

Sect	ion											Page
1.0	Objectives of the Environmental	Protection	n Pla	n								3
2.0	Environmental Protection Issues		• •			•		•			•	4
2.1	Aquatic Issues					•		•	•	•	•	4
	Terrestrial Issues					•			•	•	•	4
2.3	Cultural Resources Issues					•			•		•	4
3.0	Consistency Requirements					•			•			5
3.1	Plant Design and Operation								•	•	•	5
3.2	Changes Required for Compliance v	with Other	r Env	ironm	enta	.1 R	egu	lat	ic	ns	· .	6
4.0	Environmental Conditions											7
4.1	Unusual or Important Environmenta	al Events										7
4.2	Environmental Monitoring							٠				7
5.0	Administrative Procedures											9
5.1	Review and Audit											9
5.2	Records Retention											9
5.3		ion Plan.										9
5.4	Plant Reporting Requirements					•		•	•			9

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 impaction 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 May 17, 1985 from E. E. Van Brunt, Jr., Arizona Nuclear Power Project, to G. W. 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 satisfication 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 C

ANTITRUST CONDITIONS LICENSE NO. NPF-65

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 cost 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.