



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.

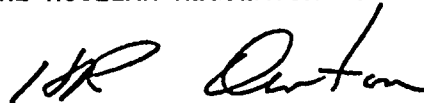
(23) Chemistry Control and Sampling Systems (Section 9.3, SSER 7)

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.

ENCLOSURE 3

CONDITIONS IN THE PALO VERDE LOW POWER LICENSE WHICH
ARE NOT INCLUDED IN THE DRAFT FULL POWER LICENSE
SINCE THE CONDITIONS SHOULD BE MET PRIOR TO
ISSUANCE OF THE FULL POWER LICENSE
(REQUIRE CERTIFICATION LETTERS FROM APS)

(6) Environmental Qualification (Section 3.11, SSER 7)

- (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.

(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.

(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.

(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.

(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.

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 3

EMERGENCY RESPONSE CAPABILITIES

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

- (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.

- (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.