September 4, 1987

Docket Nos.: STN 50-528
and STN 50-529

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: ISSUANCE OF AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. NPF-41 AND AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPF-51, FOR THE PALO VERDE NUCLEAR GENERATING STATION, UNITS 1 AND 2, RESPECTIVELY (TAC NOS. 65665 AND 65666)

The Commission has issued the subject Amendments, which are enclosed, to the Facility Operating Licenses for the Palo Verde Nuclear Generating Station, Units 1 and 2. The Amendments consist of a change to the Technical Specifications (Appendix A to each license) in response to your application transmitted by letter dated June 24, 1987.

The Amendments revise Technical Specification 3.7.1.3 for both Palo Verde Units by changing the level required for the Condensate Storage Tank from 23 feet to an indicated level of 25 feet.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's next regular bi-weekly Federal Register notice.

Sincerely,

Original signed by:
E. A. Licitra

E. A. Licitra, Senior Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:
1. Amendment No. 20 to NPF-41
2. Amendment No. 11 to NPF-51
3. Safety Evaluation

cc: See next page

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

Palo Verde

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

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

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

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

Mr. Charles Tedford, Director
Arizona Radiation Regulatory Agency
4814 South 40 Street
Phoenix, Arizona 85040

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

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

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

DOCKET NO. STN 50-528

PALO VERDE NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20
License No. NPF-41

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment, dated June 24, 1987, by the Arizona Public Service Company (APS) 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 (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of Act, and the regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment 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;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-41 is hereby amended to read as follows:

   (2) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 20, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George W. Knighton

George Knighton, Director
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosure:
Change to the Technical
Specifications

Date of Issuance: September 4, 1987

September 4, 1987

ENCLOSURE TO LICENSE AMENDMENT

AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. NPF-41

DOCKET NO. STN 50-528

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. Also to be replaced is the following overleaf page to the amended page.

Amendment Page	Overleaf Page
3/4 7-6	3/4 7-5

CONDENSATE STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.7.1.3 The condensate storage tank (CST) shall be OPERABLE with an indicated level of at least 25 feet (300,000 gallons).

APPLICABILITY: MODES 1, 2, 3,# and 4.*#

ACTION:

With the condensate storage tank inoperable, within 4 hours either:

a. Restore the CST to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours, or

b. Demonstrate the OPERABILITY of the reactor makeup water tank as a backup supply to the auxiliary feedwater pumps and restore the condensate storage tank to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN with a OPERABLE shutdown cooling loop in operation within the following 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.3.1 The condensate storage tank shall be demonstrated OPERABLE at least once per 12 hours by verifying the level (contained water volume) is within its limits when the tank is the supply source for the auxiliary feedwater pumps.

4.7.1.3.2 The reactor makeup water tank shall be demonstrated OPERABLE at least once per 12 hours whenever the reactor makeup water tank is the supply source for the auxiliary feedwater pumps by verifying:

a. That the reactor makeup water tank supply line to the auxiliary feed system isolation valve is open, and

b. That the reactor makeup water tank contains a water level of at least 26 feet (300,000 gallons).

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*Until the steam generators are no longer required for heat removed.

#Not applicable when cooldown is in progress.

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 18 months during shutdown by:

1. Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an auxiliary feedwater actuation test signal.

2. Verifying that each pump that starts automatically upon receipt of an auxiliary feedwater actuation test signal will start automatically upon receipt of an auxiliary feedwater actuation test signal.

c. Prior to startup following any refueling shutdown or cold shutdown of 30 days or longer, by verifying on a STAGGERED TEST BASIS (by means of a flow test) that the normal flow path from the condensate storage tank to each of the steam generators through one of the essential auxiliary feedwater pumps delivers at least 750 gpm at 1270 psia or equivalent.

d. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or MODE 4 for the turbine-driven pump.

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

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

DOCKET NO. STN 50-529

PALO VERDE NUCLEAR GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11
License No. NPF-51

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment, dated June 24, 1987, by the Arizona Public Service Company (APS) 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 (the Act) and the Commission's regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of Act, and the regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment 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;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-51 is hereby amended to read as follows:

   (2) Technical Specifications and Environmental Protection Plan

   The Technical Specifications contained in Appendix A, as revised through Amendment No. 11, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. APS shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

George Knighton, Director
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosure:
Change to the Technical
Specifications

Date of Issuance: September 4, 1987

September 4, 1987

ENCLOSURE TO LICENSE AMENDMENT

AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPF-51

DOCKET NO. STN 50-529

Replace the following page of the Appendix A Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains a vertical line indicating the area of change. Also to be replaced is the following overleaf page to the amended page.

Amendment Page	Overleaf Page
3/4 7-6	3/4 7-5

CONDENSATE STORAGE TANK

LIMITING CONDITION FOR OPERATION

3.7.1.3 The condensate storage tank (CST) shall be OPERABLE with an indicated level of at least 25 feet (300,000 gallons).

APPLICABILITY: MODES 1, 2, 3,# and 4.*#

ACTION:

With the condensate storage tank inoperable, within 4 hours either:

a. Restore the CST to OPERABLE status or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours, or

b. Demonstrate the OPERABILITY of the reactor makeup water tank as a backup supply to the auxiliary feedwater pumps and restore the condensate storage tank to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN with a OPERABLE shutdown cooling loop in operation within the following 6 hours.

SURVEILLANCE REQUIREMENTS

4.7.1.3.1 The condensate storage tank shall be demonstrated OPERABLE at least once per 12 hours by verifying the level (contained water volume) is within its limits when the tank is the supply source for the auxiliary feedwater pumps.

4.7.1.3.2 The reactor makeup water tank shall be demonstrated OPERABLE at least once per 12 hours whenever the reactor makeup water tank is the supply source for the auxiliary feedwater pumps by verifying:

a. That the reactor makeup water tank supply line to the auxiliary feed system isolation valve is open, and

b. That the reactor makeup water tank contains a water level of at least 26 feet (300,000 gallons).

*Until the steam generators are no longer required for heat removed.

#Not applicable when cooldown is in progress.

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 18 months during shutdown by:

1. Verifying that each automatic valve in the flow path actuates to its correct position upon receipt of an auxiliary feedwater actuation test signal.

2. Verifying that each pump that starts automatically upon receipt of an auxiliary feedwater actuation test signal will start automatically upon receipt of an auxiliary feedwater actuation test signal.

c. Prior to startup following any refueling shutdown or cold shutdown of 30 days or longer, by verifying on a STAGGERED TEST BASIS (by means of a flow test) that the normal flow path from the condensate storage tank to each of the steam generators through one of the essential auxiliary feedwater pumps delivers at least 750 gpm at 1270 psia or equivalent.

d. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or MODE 4 for the turbine-driven pump.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE NO. NPF-41

AND AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE NO. NPF-51

ARIZONA PUBLIC SERVICE COMPANY, ET. AL.

PALO VERDE NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

DOCKET NOS. STN 50-528 AND 50-529

1.0 INTRODUCTION

By letter dated June 24, 1987, the Arizona Public Service Company (APS) on behalf of itself, the Salt River Project Agricultural Improvement and Power District, Southern California Edison Company, El Paso Electric Company, Public Service Company of New Mexico, Los Angeles Department of Water and Power, and Southern California Public Power Authority (licensees), requested a change to the Technical Specifications for the Palo Verde Nuclear Generating Station, Units 1 and 2 (Appendix A to Facility Operating License Nos. NPF-41 and NPF-51, respectively). The proposed change would revise the required level of the condensate storage tank in Specification 3.7.1.3 from 23 feet to an indicated level of 25 feet.

2.0 DISCUSSION

Technical Specification 3.7.1.3 for Palo Verde, Units 1 and 2 currently states that the condensate storage tank (CST) shall be operable with a level of at least 23 feet (300,000 gallons). An inventory of 300,000 gallons in the CST is required under the most limiting conditions to permit the auxiliary feedwater system to maintain the reactor coolant system at hot standby conditions for four hours followed by a natural cooldown to shutdown cooling entry conditions.

In the June 24, 1987 amendment request, the licensees pointed out that an engineering calculation has shown that a CST level of 23 feet only ensures that 280,540 gallons of feedwater is available to the auxiliary feedwater pumps, as compared to the 300,000 gallons required. The licensees stated the engineering calculation also showed that a minimum CST level of 25 feet, as indicated on the control room level indicator, will ensure that the required 300,000 gallons will be provided to the auxiliary feedwater pumps.

As a result, the licensees have proposed a change in the required CST level in Specification 3.7.1.3 from 23 feet to an indicated level of 25 feet in order to ensure that the safety analysis assumption of 300,000 gallons is satisfied.

3.0 EVALUATION

The staff has reviewed the licensees' request and has made the following determinations. The staff concurs with the licensees' finding that an indicated level of 25 feet in the CST is required in order to ensure that 300,000 gallons of feedwater is available to the auxiliary feedwater system for decay heat removal. The staff had previously reviewed this matter prior to licensing Palo Verde, Unit 3 (Facility Operating License No. NPF-65), which is of the same design as Palo Verde, Units 1 and 2, and found it acceptable. As a result of that review, the Unit 3 Technical Specification 3.7.1.3 states that the required level for the CST is an indicated level of 25 feet. Therefore, the proposed change to Specification 3.7.1.3 for Palo Verde, Units 1 and 2, is consistent with Specification 3.7.1.3 previously reviewed and approved for Palo Verde, Unit 3.

On the basis of the above evaluation, the staff finds the proposed change to Specification 3.7.1.3 for Palo Verde, Units 1 and 2, to be acceptable.

4.0 CONTACT WITH STATE OFFICIAL

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

5.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of facility components located within the restricted area. The staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued proposed findings that the amendments involve no significant hazards consideration, and there has been no public comment on such findings. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to CFR 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

6.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed change is acceptable.

Principal Contributor: E. Licitra

Dated: September 4, 1987