

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. 40 License No. NPF-41

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment, dated August 25, 1988, as supplemented by letter dated October 18, 1988, 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.
- Accordingly, the license is amended by changes 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:



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#### (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 40, 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

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George W. Knighten, Director Project Directorate V Division of Reactor Projects - III, IV, V and Special Projects

Enclosure: Changes to the Technical Specifications

Date of Issuance: October 25, 1988



#### ENCLOSURE TO LICENSE AMENDMENT

#### AMENDMENT NO. 40 TO FACILITY OPERATING LICENSE NO. NPF-41

# DOCKET NO. STN 50-528

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicting the areas of change.

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### 6.1 **.RESPONSIBILITY**

6.1.1 The Plant Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Supervisor, or during his absence from the Control Room, a designated individual per Table 6.2-1, shall be responsible for the Control Room command function. A management directive to this effect, signed by the Vice President-Nuclear Production shall be reissued to all station personnel on an annual basis.

#### 6.2 ORGANIZATION

# 6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

An offsite and an onsite organization shall be established for unit operation and corporate management. The offsite and onsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

- Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. Those relationships shall be documented and updated, as appropriate, in the form of organizational charts. These
  organizational charts will be documented in the FSAR and updated in accordance with 10 CFR 50.71(e).
- b. There shall be an individual executive position (Executive Vice President ANPP) in the offsite organization having corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining and providing technical support in the plant so that continued nuclear safety is assured.
- c. There shall be individual management positions (Plant Managers) in the onsite organization having responsibility for overall unit safe operation and having control over those onsite resources necessary for safe operation and maintenance of the plant.
- d. Although the individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate manager onsite, they shall have sufficient organizational freedom to be independent from operating pressures.

### 6.2.2 UNIT STAFF

a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

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# UNIT STAFF (Continued)

- b. At least one licensed Reactor Operator shall be in the Control Room when fuel is in the reactor. In addition, while the reactor is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.
- c. A radiation protection technician\* shall be onsite when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A site Fire Team of at least five members shall be maintained onsite at all times\*. The Fire Team shall not include the Shift Supervisor, the STA, nor the 3 other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.
- 6.2.2.1 The unit staff working hours shall be as follows:
  - Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., Senior Reactor Operators, Reactor Operators, radiation protection technicians, auxiliary operators, and key maintenance personnel.

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<sup>\*</sup>The radiation protection technician and Fire Team composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

### UNIT STAFF (Continued)

- b. Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modifications, on a temporary basis, the following guidelines shall be followed (this excludes the STA working hours):
  - 1) An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
  - 2) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
  - 3) A break of at least 8 hours should be allowed between work periods, including shift turnover time.
  - Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.
- c. Any deviation from the above guidelines shall be authorized by the Assistant Vice President-Nuclear Production Support, Director, Standards and Technical Support or the Plant Manager or their designees who are at the manager level or above, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime in their respective groups shall be reviewed monthly by these authorized individuals or their designees to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

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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. 27 License No. NPF-51

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment, dated August 25, 1988, as supplemented by letter dated October 18, 1988, 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.
- Accordingly, the license is amended by changes 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:

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### (2) Technical Specifications and Environmental Protection Plan

- 2 -

The Technical Specifications contained in Appendix A, as revised through Amendment No. 27, 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, Director Project Directorate V Division of Reactor Projects - III, IV, V and Special Projects

Enclosure: Changes to the Technical Specifications

Date of Issuance: October 25, 1988

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#### ENCLOSURE TO LICENSE AMENDMENT

# AMENDMENT NO. 27 TO FACILITY OPERATING LICENSE NO. NPF-51

#### DOCKET NO. STN 50-529

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#### 6.1 RESPONSIBILITY

6.1.1 The Plant Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Supervisor, or during his absence from the Control Room, a designated individual per Table 6.2-1, shall be responsible for the Control Room command function. A management directive to this effect, signed by the Vice President-Nuclear Production shall be reissued to all station personnel on an annual basis.

#### 6.2 ORGANIZATION

#### 6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

An offsite and an onsite organization shall be established for unit operation and corporate management. The offsite and onsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

- Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. Those relationships shall be documented and updated, as appropriate, in the form of organizational charts. These
   organizational charts will be documented in the FSAR and updated in accordance with 10 CFR 50.71(e).
- b. There shall be an individual executive position (Executive Vice President ANPP) in the offsite organization having corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining and providing technical support in the plant so that continued nuclear safety is assured.
- c. There shall be individual management positions (Plant Managers) in the onsite organization having responsibility for overall unit safe operation and having control over those onsite resources necessary for safe operation and maintenance of the plant.
- d. Although the individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate manager onsite, they shall have sufficient organizational freedom to be independent from operating pressures.

### 6.2.2 UNIT STAFF

- a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Reactor Operator shall be in the Control Room when fuel is in the reactor. In addition, while the reactor is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.

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## UNIT STAFF (Continued)

- c. A radiation protection technician\* shall be onsite when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A site Fire Team of at least five members shall be maintained onsite at all times\*. The Fire Team shall not include the Shift Supervisor, the STA, nor the 3 other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.
- 6.2.2.1 The unit staff working hours shall be as follows:
  - a. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., Senior Reactor Operators, Reactor Operators, radiation protection technicians, auxiliary operators, and key maintenance personnel.

<sup>\*</sup>The radiation protection technician and Fire Team composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

#### UNIT STAFF (Continued)

- b. Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modifications, on a temporary basis, the following guidelines shall be followed (this excludes the STA working hours):
  - 1) An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
  - 2) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, allexcluding shift turnover time.
  - 3) A break of at least 8 hours should be allowed between work periods, including shift turnover time.
  - Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the
     entire staff on a shift.
- c. Any deviation from the above guidelines shall be authorized by the Assistant Vice President-Nuclear Production Support, Director, Standards and Technical Support or the Plant Manager or their designees who are at the manager level or above, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime in their respective groups shall be reviewed monthly by these authorized individuals or their designees to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

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AMENDMENT NO. 27



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

# ARIZONA PUBLIC SERVICE COMPANY, ET AL.

# DOCKET NO. STN 50-530

# PALO VERDE NUCLEAR GENERATING STATION, UNIT NO. 3

# AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 16 License No. NPF-74

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment, dated August 25, 1988, as supplemented by letter dated October 18, 1988, 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.
- Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C(2) of Facility Operating License No. NPF-74 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A; as revised through Amendment No. 16, 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, Director Project Directorate V Division of Reactor Projects - III, IV, V and Special Projects

Enclosure: Changes to the Technical Specifications

Date of Issuance: October 25, 1988

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#### ENCLOSURE TO LICENSE AMENDMENT

# AMENDMENT NO. 16 TO FACILITY OPERATING LICENSE NO. NPF-74

# DOCKET NO. STN 50-530

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicting the areas of change.

	REMOVE	INSERT
	XVI	XVI
	XIX	XIX
	6-1 .	6-1
		6-1A
•		6-2*
	6-3	6-3
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The following corresponding overleaf pages are also provided:

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\*Page 6-2 reissued without change

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#### 6.1 \*RESPONSIBILITY

6.1.1 The Plant Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Supervisor, or during his absence from the Control Room, a designated individual per Table 6.2-1, shall be responsible for the Control Room command function. A management directive to this effect, signed by the Vice President-Nuclear Production shall be reissued to all station personnel on an annual basis.

#### 6.2 ORGANIZATION

#### 6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

An offsite and an onsite organization shall be established for unit operation and corporate management. The offsite and onsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

- Lines of authority, responsibility and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. Those relationships shall be documented and updated, as appropriate, in the form of organizational charts. These organizational charts will be documented in the FSAR and updated in accordance with 10 CFR 50.71(e).
- b. There shall be an individual executive position (Executive Vice President ANPP) in the offsite organization having corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining and providing technical support in the plant so that continued nuclear safety is assured.
- c. There shall be individual management positions (Plant Managers) in the onsite organization having responsibility for overall unit safe operation and having control over those onsite resources necessary for safe operation and maintenance of the plant.
- d. Although the individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate manager onsite, they shall have sufficient organizational freedom to be independent from operating pressures.

#### 6.2.2 UNIT STAFF

a. Each on-duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

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## <u>UNIT STAFF</u> (Continued)

- b. At least one licensed Reactor Operator shall be in the Control Room when fuel is in the reactor. In addition, while the reactor is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.
- c. A radiation protection technician\* shall be onsite when fuel is in the reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A site Fire Team of at least five members shall be maintained onsite at all times\*. The Fire Team shall not include the Shift Supervisor, the STA, nor the 3 other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency.
- 6.2.2.1 The unit staff working hours shall be as follows:
  - Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions;
    e.g., Senior Reactor Operators, Reactor Operators, radiation protection technicians, auxiliary operators, and key maintenance personnel.

<sup>\*</sup>The radiation protection technician and Fire Team composition may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

### UNIT STAFF (Continued)

- b. Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modifications, on a temporary basis, the following guidelines shall be followed (this excludes the STA working hours):
  - 1) An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
  - 2) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
  - 3) A break of at least 8 hours should be allowed between work periods, including shift turnover time.
  - 4) Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.
- c. Any deviation from the above guidelines shall be authorized by the Assistant Vice President-Nuclear Production Support, Director, Standards and Technical Support or the Plant Manager or their designees who are at the manager level or above, or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be... included in the procedures such that individual overtime in their respective groups shall be reviewed monthly by these authorized individuals or their designees to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

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