ICENSE AUTHORITY FILE COPY

May 23, 1989

Docket Nos.: STN 60-528, STN 50-529. and STN 50-530

Mr. William F. Conway Executive Vice President Arizona Nuclear Power Project Post Office Box 52034 Phoenix, Arizona 85072-2034

#### $\mathbf{P}$ OS T E $\mathbf{D}$

50 - 528PALO VERDE 1 AMENDMENT NO.043 TO NPF-41

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Dear Mr. Conway:

SUBJECT: ISSUANCE OF AMENDMENT NO. 43 TO FACILITY OPERATING LICENSE NO. NPF-41, AMENDMENT NO. 28 TO FACILITY OPERATING LICENSE NO. NPF-51 AND AMENDMENT NO. 17 TO FACILITY OPERATING LICENSE NO. NPF-74 FOR THE PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 (TAC NOS. 71148, 71149 AND 71150)

The Commission has issued the subject Amendments, which are enclosed, to the Facility Operating Licenses for Palo Verde Nuclear Generating Station, Units 1. 2, and 3. The Amendments consist of changes to the Technical Specifications (Appendix A to each license) in response to your application transmitted by letter dated November 9, 1988.

The Amendments revise Palo Verde Nuclear Generating Station (PVNGS) Technical Specification Section 3/4.4.5, "Reactor Coolant System Leakage," by changing the operability requirements of the containment radioactivity monitoring systems and the associated Action Statement.

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,

/s/

Terence L. Chan, Senior Project Manager Project Directorate V Division of Reactor Projects III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 43 to NPF-41 Amendment No. 28 to NPF-51 1.
- 2.
- Amendment No. 17 to NPF-74 3.
- Safety Evaluation 4.

cc: See next page

\*See previous concurrence

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|---------------------------------|--------------------------|---------------------|--------|--|
| DRSP/PDV/LA<br>ULLEE<br>5/11/89 | DRSP/PDV/PM*<br>TChan:rw | SPLP                | OGC*   |  |
| JLKe                            | TChan:rw H               | i JCraig            | JM     |  |
| 5/14/89                         | 4/26/89                  | L JCraig<br>5/18/89 | 5/8/89 |  |





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

May 23, 1989

Docket Nos.: STN 50-528, STN 50-529, and STN 50-530

Mr. William F. Conway Executive Vice President Arizona Nuclear Power Project Post Office Box 52034 Phoenix, Arizona 85072-2034

Dear Mr. Conway:

SUBJECT: ISSUANCE OF AMENDMENT NO. 43 TO FACILITY OPERATING LICENSE NO. NPF-41, AMENDMENT NO. 28TO FACILITY OPERATING LICENSE NO. NPF-51 AND AMENDMENT NO. 17 TO FACILITY OPERATING LICENSE NO. NPF-74 FOR THE PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 (TAC NCS. 71148, 71149 AND 71150)

The Commission has issued the subject Amendments, which are enclosed, to the Facility Operating Licenses for Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The Amendments consist of changes to the Technical Specifications (Appendix A to each license) in response to your application transmitted by letter dated November 9, 1988.

The Amendments revise Palo Verde Nuclear Generating Station (PVNGS) Technical Specification Section 3/4.4.5, "Reactor Coolant System Leakage," by changing the operability requirements of the containment radioactivity monitoring systems and the associated Action Statement.

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 <u>Federal</u> Register notice.

Sincepé aluce

Terence L. Chan, Senior Project Manager Project Directorate V Division of Reactor Projects III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

- 1. Amendment No. 43 to NPF-41
- 2. Amendment No. 28 to NPF-51
- 3. Amendment No. 17 to NPF-74
- 4. Safety Evaluation

cc: See next page

Mr. William F. Conway Arizona Nuclear Power Project

#### cc:

Mr. William F. Conway Arizona Nuclear Power Project Executive Vice President Post Office Box 52034 Phoenix, Arizona 85072-2034

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

Mr. Charles B. Brinkman Washington Nuclear Operations Combustion Engineering, Inc. 12300 Twinbrook Parkway, Suite 330 Rockville, Maryland 20852

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

(7)



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 CPERATING LICENSE

Amendment Nu.43 License No. NPF-41

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment, dated November 9, 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 the 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:

# (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.43, 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. Knighton, Director Project Directorate V Division of Reactor Projects III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosure: Changes to the Technical Specifications

Date of Issuance: May 23, 1989

# ENCLOSURE TO LICENSE AMENDMENT

# AMENDMENT NO. 43 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 vertical lines indicating the areas of change. Also to be replaced is the following overleaf page to the amended page.

| Amendment Page | <u>Overleaf Page</u> |
|----------------|----------------------|
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### REACTOR COOLANT SYSTEM

#### 3/4.4.5 REACTOR COOLANT SYSTEM LEAKAGE

#### LEAKAGE DETECTION SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.4.5.1 The following Reactor Coolant System leakage detection systems shall be OPERABLE:

- a. Either the containment atmosphere gaseous radioactivity or containment atmosphere particulate radioactivity monitoring system, and
- b. The containment sump level and flow monitoring system.

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

#### ACTION:

- a. With either/or both the containment atmosphere gaseous radioactivity and containment atmosphere particulate radioactivity monitors INOPERABLE, operation may continue for up to 30 days provided the containment sump level and flow monitoring system is OPERABLE and gaseous and/or particulate grab samples of the containment atmosphere are obtained at least once per 12 hours and analyzed within the subsequent 3 hours; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With the containment sump level and flow monitoring system INOPERABLE, operation may continue for up to 30 days provided the containment atmosphere gaseous radioactivity monitoring and the containment atmosphere particulate radioactivity monitoring systems are OPERABLE; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

- 4.4.5.1 The leakage detection systems shall be demonstrated OPERABLE by:
  - a. Containment atmosphere gaseous and particulate monitoring system-performance of CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST at the frequencies specified in Table 4.3-3,
  - b. Containment sump level and flow monitoring system-performance of CHANNEL CALIBRATION at least once per 18 months.

PALO VERDE - UNIT 1

AMENDMENT NO. 43

# **TABLE 4.4-2**

### **STEAM GENERATOR TUBE INSPECTION**

| 1ST SAMPLE INSPECTION       |  | 2ND SAMPLE INSPECTION   |  | 3RD SAMPLE INSPECTION                                  |   |                              |
|-----------------------------|--|---|--|--|---|------------------------------|
| Sample Size                 | Result   | Action Required   | Result   | Action Required  | Result  | Action Required              |
| A minimum of<br>S Tubes per | C-1  | None  | N, A.  | N. A.  | N. A.   | N. A.                        |
| S. G.                       | 5. G.<br>C–2 Plug defective tubes  | Plug defective tubes<br>and inspect additional                    |  | None<br>Plug defective tubes<br>and inspect additional | N. A.   | N. A.                        |
|                             |  | 2S tubes in this S. G.  |  |  | C-1<br>C-2  | None<br>Plug defective tubes |
|                             |  |   | 4S tubes in this S. G.   | C-3  | Perform action for<br>C-3 result of first<br>sample |                              |
|                             |  | C-3   | Perform action for<br>C-3 result of first<br>sample  | N. A.  | N. A.   |                              |
|                             | C-3  | Inspect all tubes in<br>this S. G., plug de-<br>fective tubes and | All other<br>S. G.s are<br>C-1   | None   | N. A.   | N. A.                        |
|                             | inspect 2S tubes in<br>each other S. G.<br>Notification to NRC<br>pursuant to §50.72 | Some S. G.s<br>C-2 but no<br>additional<br>S. G. are<br>C-3       | Perform action for<br>C-2 result of second<br>sample   | N. A.  | N. A.   |                              |
| (b)(2) of 10 CFR<br>Part 50 | (b)(2) of 10 CFR<br>Part 50  |   | Inspect all tubes in<br>each S. G. and plug<br>defective tubes.<br>Notification to NRC<br>pursuant to §50.72<br>(b)(2) of 10 CF R<br>Part 50 | N. A.  | N. A.   |                              |

 $S = 3 \frac{N}{n} \%$  Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection

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



# ARIZONA PUBLIC SERVICE COMPANY, ET AL.

### DOCKET NC. STN 50-529

#### PALO VERDE NUCLEAR GENERATING STATION, UNIT NO. 2

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.28 License No. NPF-51

- |

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment, dated November 9, 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 the 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:

# (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.28, 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. Knighton, Director Project Directorate V Division of Reactor Projects III, IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosure: Changes to the Technical Specifications

Date of Issuance: May 23, 1989

# ENCLOSURE TO LICENSE AMENDMENT

# AMENDMENT NO. 28 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 contaisn vertical lines indicating the areas of change. Also to be replaced is the following overleaf page to the amended page.

| Amendment Page | Overleaf Page |
|----------------|---------------|
| 3/4 4-18       | 3/4 4-17      |

### REACTOR COOLANT SYSTEM

#### 3/4.4.5 REACTOR COOLANT SYSTEM LEAKAGE

#### LEAKAGE DETECTION SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.4.5.1 The following Reactor Coolant System leakage detection systems shall be OPERABLE:

- Either the containment atmosphere gaseous radioactivity or containment atmosphere particulate radioactivity monitoring system, and
- b. The containment sump level and flow monitoring system.

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

#### ACTION:

- a. With either/or both the containment atmosphere gaseous radioactivity and containment atmosphere particulate radioactivity monitors INOPERABLE, operation may continue for up to 30 days provided the containment sump level and flow monitoring system is OPERABLE and gaseous and/or particulate grab samples of the containment atmosphere are obtained at least once per 12 hours and analyzed within the subsequent 3 hours; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With the containment sump level and flow monitoring system INOPERABLE, operation may continue for up to 30 days provided the containment atmosphere gaseous radioactivity monitoring and the containment atmosphere particulate radioactivity monitoring systems are OPERABLE; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

- 4.4.5.1 The leakage detection systems shall be demonstrated OPERABLE by:
  - a. Containment atmosphere gaseous and particulate monitoring system-performance of CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST at the frequencies specified in Table 4.3-3,
  - b. Containment sump level and flow monitoring system-performance of CHANNEL CALIBRATION at least once per 18 months.

PALO VERDE - UNIT 2

3/4 4-18

AMENDMENT NO. 28

# TABLE 4.4-2

# STEAM GENERATOR TUBE INSPECTION

PALO VERDE - UNIT 2

| 1ST SAMPLE INSPECTION       |  | 2ND SAMPLE INSPECTION                                       |   | 3RD SAMPLE INSPECTION                               |        |   |
|-----------------------------|--|---|---|---|--------|---|
| Sample Size                 | Result   | Action Required   | Result  | Action Required                                     | Result | Action Required                                     |
| A minimum'of<br>S Tubes per | C-1  | None  | N. A.   | N. A.   | N. A.  | N. A.   |
| S. G.                       | C-2  | Plug defective tubes  | C-1   | None  | N. A.  | N. A.   |
|                             |  | and inspect additional 2S tubes in this S. G.               |   | Plug defective tubes                                | C-1    | None  |
|                             |  | 23 tubes in this 5, G.                                      | C2  | and inspect additional 4S tubes in this S. G.       | C-2    | Plug defective tubes                                |
|                             |  |   |   | 45 tubes in this 5. G.                              | C-3    | Perform action for<br>C-3 result of first<br>sample |
|                             |  |   | C-3   | Perform action for<br>C-3 result of first<br>sample | N. A.  | N. A.   |
|                             | C-3 Inspect all tubes in<br>this S. G., plug de-<br>fective tubes and                | All other<br>S. G.s are<br>C-1                              | None  | N. A.   | N. A.  |   |
|                             | inspect 2S tubes in<br>each other S. G.<br>Notification to NRC<br>pursuant to §50.72 | Some S. G.s<br>C-2 but no<br>additional<br>S. G. are<br>C-3 | Perform action for<br>C–2 result of second<br>sample  | N. A.   | N. A.  |   |
|                             | (b)(2) of 10 CFR<br>Part 50  | Additional<br>S. G. is C-3                                  | Inspect all tubes in<br>each S. G. and plug<br>defective tubes.<br>Notification to NRC<br>pursuant to §50.72<br>(b)(2) of 10 CFR<br>Part 50 | N. A.   | N. A.  |   |

n

 $S = 3 \frac{N}{N}$  Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection

3/4 4-17



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

### ARIZONA PUBLIC SERVICE COMPANY, ET AL.

DOCKET NO. STN 50-530

PALC VERDE NUCLEAR GENERATING STATION, UNIT NO. 3

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No.17 License No. NPF-74

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment, dated November 9, 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 the 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:

# (2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.17, 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. Knighton, Director Project Directorate V Division of Reactor Projects III, IV, V and Special Projects Office of Nuclear Reactor Regulation

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Enclosure: Changes to the Technical Specifications

Date of Issuance: May 23, 1989

# ENCLOSURE TO LICENSE AMENDMENT

# AMENDMENT NO. 17 TO FACILITY OPERATING LICENSE NO. NPF-74

# DOCKET NO. STN 50-530

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

| Amendment Page | <u>Overleaf Page</u> |  |  |  |
|----------------|----------------------|--|--|--|
| 3/4 4-18       | 3/4 4-17             |  |  |  |

### REACTOR COOLANT SYSTEM

#### 3/4.4.5 REACTOR COOLANT SYSTEM LEAKAGE

#### LEAKAGE DETECTION SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.4.5.1 The following Reactor Coolant System leakage detection systems shall be OPERABLE:

- a. Either the containment atmosphere gaseous radioactivity or containment atmosphere particulate radioactivity monitoring system, and
- b. The containment sump level and flow monitoring system.

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

#### ACTION:

- a. With either/or both the containment atmosphere gaseous radioactivity and containment atmosphere particulate radioactivity monitors INOPERABLE, operation may continue for up to 30 days provided the containment sump level and flow monitoring system is OPERABLE and gaseous and/or particulate grab samples of the containment atmosphere are obtained at least once per 12 hours and analyzed within the subsequent 3 hours; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With the containment sump level and flow monitoring system INOPERABLE, operation may continue for up to 30 days provided the containment atmosphere gaseous radioactivity monitoring and the containment atmosphere particulate radioactivity monitoring systems are OPERABLE; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

- 4.4.5.1 The leakage detection systems shall be demonstrated OPERABLE by:
  - a. Containment atmosphere gaseous and particulate monitoring system-performance of CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TEST at the frequencies specified in Table 4.3-3,
  - b. Containment sump level and flow monitoring system-performance of CHANNEL CALIBRATION at least once per 18 months.

# TABLE 4.4-2

# STEAM GENERATOR TUBE INSPECTION

| 1ST SAMPLE INSPECTION       |   | 2ND SAMPLE INSPECTION  |   | 3RD SAMPLE INSPECTION                                |        |   |
|-----------------------------|---|--|---|--|--------|---|
| Sample Size                 | Result  | Action Required  | Result  | Action Required                                      | Result | Action Required                                     |
| A minimum of<br>S Tubes per | C-1   | None   | N. A.   | N. A.  | N. A.  | N. A.   |
| <b>S.</b> G.                | C2  | Plug defective tubes   | C-1   | None   | N. A.  | N. A.   |
|                             |   | and inspect additional 2S tubes in this S. G.  |   | Plug defective tubes                                 | C-1    | None  |
|                             |   |  | C-2   | and inspect additional<br>4S tubes in this S. G.     | C-2    | Plug defective tubes                                |
|                             |   |  |   |  | C-3    | Perform action for<br>C-3 result of first<br>sample |
|                             |   |  | C-3   | Perform action for<br>C-3 result of first<br>sample  | N. A.  | N. A.   |
|                             | C-3 Inspect all tubes in<br>this S. G., plug de-<br>fective tubes and | All other<br>S. G.s are<br>C-1   | None  | N. A.  | N. A.  |   |
|                             |   | inspect 2S tubes in<br>each other S. G.<br>Notification to NRC<br>pursuant to §50.72 | Some S. G.s<br>C-2 but no<br>additional<br>S. G. are<br>C-3   | Perform action for<br>C—2 result of second<br>sample | N. A.  | N. A.   |
|                             | (b)(2) of 10 CFR<br>Part 50   | Additional<br>S. G. is C-3   | Inspect all tubes in<br>each S. G. and plug<br>defective tubes.<br>Notification to NRC<br>pursuant to §50.72<br>(b)(2) of 10 CFR<br>Part 50 | N. A.  | N. A   |   |

N % S = 3

Where N is the number of steam generators in the unit, and n is the number of steam generators inspected during an inspection ċ

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 43 TO FACILITY OPERATING LICENSE NO. NPF-41, AMENDMENT NO. 28 TO FACILITY OPERATING LICENSE NO. NPF-51 AND AMENDMENT NO.17 TO FACILITY OPERATING LICENSE NO. NPF-74 ARIZONA PUBLIC SERVICE COMPANY, ET AL. PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 DOCKET NOS. STN 50-528, STN 50-529, AND STN 50-530

#### 1.0 INTRODUCTION

By letter dated November 9, 1988 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 changes to the Technical Specifications for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3 (Appendix A to Facility Operating License Nos. NPF-41, NPF-51, and NPF-74, respectively). The proposed changes would revise Technical Specifications (TS) Section 3/4.4.5, "Reactor Coolant System Leakage" by changing the operability requirements of the containment radioactivity monitoring systems. The action statement is also revised to reflect this change.

#### 2.0 DISCUSSION AND EVALUATION

The existing TS Section 3/4.4.5 for each of the Palo Verde licenses identifies three systems which comprise the Reactor Coolant System Leakage Detection System (RCSLDS):

- a. containment atmosphere particulate radioactivity monitoring system
- containment atmosphere gaseous radioactivity monitoring system, and
- c. containment sump level and flow monitoring system

The existing TS Action Statement permits continued operation for up to 30 days if any one of the three monitoring systems becomes inoperable, provided

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that grab samples of the containment atmosphere are obtained and analyzed at least once per 24 hours when the required gaseous and/or particulate radioactivity monitoring system is inoperable. This Action Statement requires the plant to shutdown in the event both the gaseous and particulate radioactivity monitoring systems are inoperable, or if either one of the radioactivity monitoring systems and the containment sump level and flow monitoring system are inoperable.

In actuality, there are two independent systems which comprise the RCSLDS. The containment atmosphere gaseous monitor and the containment atmosphere particulate monitor share a common sample point, sample line, isolation valves, sample fan, radiation monitor package and power supply. There are two monitoring systems, one looking at a particulate filter assembly and the other at a gas chamber. Should one of the common components in the system fail, both systems will become inoperable. With the present technical specifications, the unit is required to shut down in 6 hours. However, plant shutdown is unnecessary because adequate capability remains to detect primary system leakage. The containment sump monitoring capabilities are available and containment atmosphere airborne radioactivity levels will be determined using grab samples.

To eliminate this unnecessary shutdown requirement, the licensees propose to revise the operability requirements of the three systems which comprise the RCSLDS to accurately reflect the systems configuration, by requiring the containment sump level and flow monitoring system and either of the two containment atmosphere radioactivity monitors to be operable. In conjunction with this change, the licensees propose to revise the Action Statement to permit continued operation for up to 30 days in the event either/or both containment atmosphere particulate radioactivity and containment atmosphere gaseous monitors are inoperable in order to allow repair or replacement of inoperable components. The proposed Action Statement also requires more frequent sampling (i.e., once every 12 hours rather than once every 24 hours) than the present requirement. As such we find this change to be acceptable.

The proposed Action Statement for inoperable containment sump level and flow monitoring system would permit continued operation for 30 days to allow for repair or replacement of inoperable components if both the gaseous and particulate radioactivity monitoring systems are operable. This is the same requirement as the present technical specifications. Grab samples would not be required because adequate leakage detection is provided by the operable radioactivity monitor without the grab samples. We find this change acceptable.

The proposed change eliminates unnecessary plant shutdowns because of inoperable components common to the containment atmosphere gaseous and particulate radioactivity monitoring systems. It also eliminates an unnecessary sampling procedure when at least one containment radioactivity monitoring system is available for leak detection. Further, the compensatory measure of grab sampling is improved due to the increased sample frequency and prompt analysis requirement. Therefore, we find the proposed technical specification changes to be acceptable.

### 3.0 CONTACT WITH STATE OFFICIAL

The Arizona Radiation Regulatory Agency has been advised of the proposed autermination of no significant hazards consideration with regard to these changes. No comments were received.

#### 4.G ENVIRONMENTAL CONSIDERATION

The amendments involve changes in the installation or use of facility components located within the restricted area as defined in 10 CFR 20. The staff has determined that the amendments involve no significant increase in the amount, and no significant change in the type, of any effluent 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 hazard consideration, and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need to be prepared in connection with the issuance of the amendments.

#### 5.0 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 the 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 changes are acceptable.

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