

Docket No.: 50-528

AUG 5 1985

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. 1 to Facility Operating License NPF-41
for Palo Verde Unit 1

The Commission has issued the enclosed Amendment No. 1 to Facility Operating License No. NPF-41 for the Palo Verde Nuclear Generating Station, Unit 1. The amendment consists of a change to the Technical Specifications in response to your application transmitted by letter dated July 12, 1985, and confirms the telephone notification given to Mr. J. Bynum, et al. of Arizona Public Service Company on July 12, 1985, that the requested change has been granted.

The amendment revises Technical Specification 3.4.5.2, Action Statement b, to allow, on a one time basis only during the power ascension program, an additional 72 hours in hot standby before proceeding to cold shutdown, in order to determine the pathway of unidentified leakage.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance and Final Determination of No Significant Hazards Consideration and Opportunity for Hearing will be included in the Commission's Monthly Notice.

Sincerely,

Original signed by:
George W. Knighton

George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

Enclosures:

1. Amendment No. 1 to NPF-41
2. Safety Evaluation

cc: See next page

LB#3/DL
JLee
07/23/85

LB#3/DL *EAX*
ELicitra:dh
07/23/85

OELD *LD*
L. Dewey
07/29/85

LB#3/DL
GWNighton
07/25/85

(for) WB
AD/L/DL
TMNovak
08/2/85

D/DL *HA*
HThompson
08/2/85

8508290193 850805
PDR ADOCK 05000528
P PDR

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

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

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

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

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

Ms. Jill Morrison
522 E. Colgate
Tempe, Arizona 85238

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

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

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

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

Mr. Roy Zimmerman
U.S. Nuclear Regulatory Commission
P. O. Box 239
Arlington, Arizona 85322

Ms. Patricia Lee Hourihan
6413 S. 26th Street
Phoenix, Arizona 85040

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

Chairman
Arizona Corporation Commission
2222 West Washington
Phoenix, Arizona 85007

Arizona Radiation Regulatory Agency
ATTN: Ms. Clara Palovic, Librarian
925 South 52nd Street
Tempe, Arizona 85238

Mr. Charles Tedford, Director
Arizona Radiation Regulatory Agency
924 South 52nd Street, Suite 2
Tempe, Arizona 85281

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. 1
License No. NPF-41

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment, dated July 12, 1985, 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 rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of Act, and the rules and 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; and
 - 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.
1. 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:

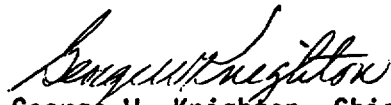
8508290200 850805
PDR ADOCK 05000528
P PDR

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 1, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in 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 July 12, 1985.

FOR THE NUCLEAR REGULATORY COMMISSION


George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

Enclosure:
Changes to the Technical
Specifications

Date of Issuance: AUG 5 1985

AUG 5 1985

ENCLOSURE TO LICENSE AMENDMENT

AMENDMENT NO. 1 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 indicating the area of change. Also to be replaced are the following overleaf pages to the amended pages.

Remove Old Pages

3/4 4-19

3/4 4-20

Insert New Pages

3/4 4-19

3/4 4-20

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATION

- 3.4.5.2 Reactor Coolant System leakage shall be limited to:
- No PRESSURE BOUNDARY LEAKAGE,
 - 1 gpm UNIDENTIFIED LEAKAGE,
 - 1 gpm total primary-to-secondary leakage through all steam generators, and 720 gallons per day through any one steam generator,
 - 10 gpm IDENTIFIED LEAKAGE from the Reactor Coolant System, and
 - 1 gpm leakage at a Reactor Coolant System pressure of 2250 ± 20 psia from any Reactor Coolant System pressure isolation valve specified in Table 3.4-1.

APPLICABILITY: MODES 1, 2, 3, and 4

ACTION:

- With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- * With any Reactor Coolant System leakage greater than any one of the limits, excluding PRESSURE BOUNDARY LEAKAGE and leakage from Reactor Coolant System pressure isolation valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With any Reactor Coolant System pressure isolation valve leakage greater than the above limit, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least one closed manual or deactivated automatic valve, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- With RCS leakage alarmed and confirmed in a flow path with no flow rate indicators, commence an RCS water inventory balance within 1 hour to determine the leak rate.

SURVEILLANCE REQUIREMENTS

4.4.5.2.1 Reactor Coolant System leakages shall be demonstrated to be within each of the above limits by:

- Monitoring the containment atmosphere gaseous and particulate radioactivity monitor at least once per 12 hours.

*As a one time only extension during the power ascension program, an additional 72 hours is granted to cold shutdown. During this 72 hours if the unidentified leakage exceeds 2.0 gpm, an immediate cooldown will be initiated. The RCS leakage (Surveillance Requirement 4.4.5.2.1.c) will be calculated at least once per eight hours during this 72-hour extension.

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

- b. Monitoring the containment sump inventory and discharge at least once per 12 hours.
- c. Performance of a Reactor Coolant System water inventory balance at least once per 72 hours.
- d. Monitoring the reactor head flange leakoff system at least once per 24 hours.

4.4.5.2.2 Each Reactor Coolant System pressure isolation valve specified in Table 3.4-1 shall be demonstrated OPERABLE by verifying leakage to be within its limit:

- a. At least once per 18 months,
- b.* Prior to entering MODE 2 whenever the plant has been in COLD SHUTDOWN for 72 hours or more and if leakage testing has not been performed in the previous 9 months,
- c. Prior to returning the valve to service following maintenance, repair or replacement work on the valve,
- d.* Within 24 hours following valve actuation due to automatic or manual action or flow through the valve,
- e.* Within 72 hours following a system response to an Engineered Safety Feature actuation signal.

The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4.

*The provisions of Specifications 4.4.5.2.2.b, 4.4.5.2.2.d, and 4.4.5.2.2.e are not applicable for valves UV 651, UV 652, UV 653 and UV 654 due to position indication of valves in the control room.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20556

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 1 TO FACILITY OPERATING LICENSE NO. NPF-41

ARIZONA PUBLIC SERVICE COMPANY, ET AL.

PALO VERDE NUCLEAR GENERATING STATION, UNIT NO. 1

DOCKET NO. STN 50-528

Introduction

By letter dated July 12, 1985, as further supplemented by letter dated July 15, 1985, 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 an emergency change to the Technical Specifications (Appendix A to Facility Operating License NPF-41) for the Palo Verde Nuclear Generating Station, Unit 1. The July 15, 1985 letter confirmed the information provided by APS in a July 12, 1985 telephone call. The proposed change would revise Technical Specification 3.4.5.2, Action Statement b, on a one time basis only during the power ascension test program, in order to determine the pathway of unidentified leakage in the reactor coolant system.

Discussion

Palo Verde Unit 1 is currently conducting its power ascension test program. On July 11, 1985, during routine monitoring of the reactor coolant system, APS determined an unidentified leakage rate from the system of 1.2 gallons per minute (gpm). The 1.2 gpm exceeds current Technical Specification 3.4.5.2 limit of 1.0 gpm for unidentified leakage from the reactor coolant system. Action Statement b for this technical specification requires that the leakage rate be reduced to within the 1.0 gpm limit within four hours or be in at least HOT STANDBY within the next six hours and in COLD SHUTDOWN within the following thirty hours.

By letters dated July 12 and 15, 1985, APS stated that in accordance with Technical Specification 3.4.5.2, Action Statement b was entered into for Palo Verde Unit 1 on July 11, 1985 and the plant was taken to hot standby. As of July 12, 1985, the unidentified leakage had still not been resolved and the plant would be required to be in cold shutdown within 30 hours.

In its submittal, APS requested a one time change to Technical Specification 3.4.5.2 to allow maintaining the plant in hot standby for an additional 72 hours. This time extension request is to (1) allow additional time to determine the leakage pathway (under conditions of temperature and pressure more conducive to detection) prior to entering cold shutdown and (2) take additional reactor coolant system inventory data to verify the inventory calculations.

8508290218 850805
PDR ADOCK 05000528
P PDR

APS states that inventory surveillance requirements for the reactor coolant system have been increased to at least once per eight hours. APS also states that, if the unidentified leakage is determined to increase to greater than 2.0 gpm during the requested 72 hour time extension, Palo Verde Unit 1 will proceed directly to cold shutdown. In addition, APS states that the current activity level in the reactor coolant system (2.1×10^{-2} $\mu\text{Ci/cc}$) is approximately 200 times lower than that assumed in the accident analyses since the plant is in the early startup testing phase.

Evaluation

This proposed change falls into the category of an emergency change since failure of the NRC to take action would result in Palo Verde Unit 1 going to cold shutdown before the source of the unidentified leakage was found, thus causing a delay in the continuation of the present power ascension program until the request is granted.

The need for the proposed action was not determined until July 12, 1985. The staff has reviewed the facts concerning the request and concludes that APS has made a timely submittal, that the power ascension program cannot proceed without NRC action, and that action by the licensees could not preclude this situation.

The action requested by the licensees is to change, on a one time basis only, Action Statement b in Technical Specification 3.4.5.2 to allow the plant to remain in hot standby an additional 72 hours in order to determine the pathway of the unidentified leakage under conditions more conducive to detection. During this time, the inventory surveillance requirements have been increased to at least once every eight hours. In addition, if the unidentified leakage increases to over 2.0 gpm during this time, the plant will proceed directly to cold shutdown.

The staff has reviewed the information submitted by the licensees. In view of (1) the fact that the plant was subcritical, (2) the increased level of inventory surveillance, and (3) the low level of activity in the primary system, the staff finds that the requested additional limited time in hot standby to identify the leakage pathway is prudent and, therefore, acceptable. Staff approval of the request was granted to APS by phone on July 12, 1985.

Environmental Consideration

The staff has determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, the staff has further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Part 51.5(d)(4), that an environmental impact statement, or a negative declaration and environmental impact appraisal, need not be prepared in connection with the issuance of that amendment.

Final No Significant Hazards Consideration Determination

The State was informed by telephone on July 12, 1985 of the staff's proposed no significant hazards consideration determination. The State contact had no comments on the proposed determination. The Commission has provided certain examples (48 FR 14870) of actions likely to involve no significant hazards considerations. The licensees' request in this case does not match any of those examples. However, based on the review of the licensees' submittal as described herein, the staff has made a final determination that the licensees' amendment request does not involve a significant hazards consideration since operation of Palo Verde Unit 1 with the requested change would not (1) involve a significant increase in the probability or consequences of an accident previously analyzed since the duration of the change is for a limited time only and the activity in the reactor coolant system at the time is 200 times less than that assumed in accident analyses, (2) create the possibility of a new or different kind of accident from any accident previously analyzed since the change does not allow exiting from the design basis envelopes for any of the accidents previously analyzed, and (3) involve a significant reduction in a margin of safety because of the reasons cited above for (1) and (2) and since the plant will be subcritical during the limited time that the change is in effect.

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

Dated: AUG 5 1985

ISSUANCE OF AMENDMENT NO. 1 TO FACILITY OL NPF-41 FOR
PALO VERDE UNIT 1

DISTRIBUTION

~~Docket File~~ 50-528

NRC PDR

Local PDR

NSIC

PRC System

LB#3 Reading

JLee (15)

EALicitra

TMNovak

JSaltzman, SAB

Attorney, OELD

CMiles

HDenton

DGEisenhut

HThompson

JRutberg

AToalston

WMiller, LFMB

JPartlow

BGrimes

EJordan

LHarman

EButcher

TBarnhart (4)

IBailey