

U.S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos.: 50-528/92-16, 50-529/92-16, 50-530/92-16

License Nos.: NPF-41, NPF-51, NPF-74

Licensee: Arizona Public Service Company
P. O. Box 53999, Sta. 9012
Phoenix, Arizona 85072-3999

Facility Name: Palo Verde Nuclear Generating Station, Units 1, 2, and 3

Inspection at: Wintersburg, Arizona

Inspection Conducted: April 13-15, 1992

Inspection by: R. Bocanegra 5/12/92
R. Bocanegra, Radiation Specialist Date Signed

Accompanied by: G. P. Yuhas, Sr. 5/12/92
N. Mamosh, Radiation Specialist Date Signed

Approved by: G. P. Yuhas 5/12/92
G. P. Yuhas, Chief Date Signed
Reactor Radiological Protection Branch

Summary:

Areas Inspected: A special announced inspection to determine if the licensee has developed and implemented a program for conducting periodic evaluations of health and safety issues as a result of significant changes to the Palo Verde site and its environs as described in Sections 2.1 and 2.2 of the Updated Final Safety Analysis Report (UFSAR). Specifically, the inspection covered the licensee's evaluation of public health and safety issues resulting from changes in population distribution; and industrial, military, and transportation hazards at or near the Palo Verde site. NRC Temporary Instruction (TI) 2515/112 was used.

Results: The licensee did not have a formally documented program to periodically review and evaluate public health and safety issues resulting from significant changes on or near the reactor site. The licensee had a procedure for updating licensing documents, however, it did not contain provisions to periodically review and evaluate changes to the environs as described in Chapter 2 of the UFSAR. The annual land use census required by Section 4/3.12.2 of the Technical Specifications was being performed.

DETAILS

1. Persons Contacted

Licensee

T. Barsuk, Offsite Supervisor, Emergency Planning
*H. Bieling, Manager, Emergency Planning
*T. Braddish, Manager, Compliance
*P. Coffin, Compliance Engineer
*J. Draper, Site Representative, SCE, LADWP, PNM
*D. Elkinton, SR. QA Tech. Specialist, Quality Assurance and Monitoring
*C. Emmett, Sr. Information Coordinator, Management Services
*R. Fullner, Manager, Quality Assurance and Monitoring
*R. Henry, Site Representative, Salt River Project
*P. Hughes, General Manager, Site Radiation Protection
*D. Kanitz, Compliance Engineer
G. Michael, Licensing Engineer, Licensing
*T. Murphy, RMS Supervisor, Technical Services
D. Peckham, Advisor, Chemistry
*J. Scott, General Manager, Site Chemistry
*R. Sorenson, Manager, Chemistry RMS/Effluents
*W. Watson, System Engineer, OCS
W. Wolfe, Offsite Supervisor, Emergency Planning

Nuclear Regulatory Commission

*D. Coe, Senior Resident Inspector
*L. Coblentz, Radiation Specialist
*F. Ringwald, Resident Inspector

(*) Denotes the individuals that attended the exit meeting held April 15, 1992. The inspectors also held discussions with other personnel during the inspection.

2. UFSAR Site Description

The Palo Verde Nuclear Generating Station (PVNGS) site is located in Maricopa County in Southwestern Arizona. The site is 16 miles west of the city of Buckeye and 34 miles west of the nearest boundary of the city of Phoenix. The site area is flat with small scattered hills. To the west and northwest are the Palo Verde Hills, sharply rising to 2172 feet above sea level. To the south is Centennial Wash, an intermittent stream backed by gently rising uplands with scattered, isolated, steeply sloped hills and buttes. Buckeye Valley lies to the east and southeast. To the north and northeast, the terrain is relatively flat desert traversed by numerous intermittent streams that are typical of the region. The site is bounded on the south by Ward Road (Elliot Road) and on the west by

Wintersburg Road. No public roads, railroads, or waterways cross the site. The licensee owns all the land within the site boundary.

Population centers with greater than 500 persons and less than 500 persons (as of July 1, 1978) within a 50-mile radius of the site are listed in UFSAR Tables 2.1-4 and 2.1-5 respectively. Figure 2.1-5 illustrates the 1978 estimated residential population located within 10 miles of the site. An aerial house count followed by ground verification was used to estimate the population. The PVNGS low population zone (LPZ) has been defined as a 4-mile radius area. UFSAR Chapter 2 also includes population estimates within a 10-mile radius of the site for 1980 through 2030.

Section 2.2 of the UFSAR describes nearby (10-mile radius) industrial, transportation, and military facilities. The Hasayampa Cotton Gin was the only industrial facility identified in the UFSAR. One interstate highway, a railroad, and two petroleum product pipelines were identified within a 10-mile radius of the site. Numerous airways (military and commercial) were also identified.

3. Licensee Evaluation of Changes to the Environs Around Licensed Reactor Facilities (II 25515/112)

The licensee's program for monitoring and documenting changes to the environs surrounding the Palo Verde Site was examined. The following items were noted.

- o The physical site description found in Sections 2.1 and 2.2 of the UFSAR was in agreement with observations made by the inspectors. The surrounding area is largely empty desert, and the inspectors noted no obvious changes.
- o The licensee did not have a formally documented program to periodically review and evaluate public health and safety issues resulting from significant changes on or near the reactor site.
- o The licensee had a procedure (93AC-OLC01) for updating licensing documents, however, it did not contain provisions to periodically review and evaluate changes to the environs as described in Chapter 2 of the UFSAR.
- o According to procedure 93AC-OLC01, the Manager of Nuclear Licensing is responsible for the maintenance of PVNGS licensing basis. Individual department personnel are responsible for identifying and initiating Licensing Document Change Requests as needed to ensure that licensing documents are up to date.
- o The annual land use census required by Section 4/3.12.2 of the Technical Specifications was being performed.
- o The licensee, in coordination with Maricopa County, tracks population changes within the 10-mile EPZ on an annual basis for emergency planning purposes.

The inspectors noted that the lack of a formal program to periodically review and evaluate changes to the environs surrounding the site appeared



to be a weakness. The inspectors concluded that the licensee had not provided assurance that the assessments presented in Sections 2.1 and 2.2 of the UFSAR remained valid.

No violations or deviations were identified.

4. Exit Interview

The inspectors met with the individuals denoted in Section 1 at the conclusion of the inspection on April 15, 1992. The scope and findings of the inspection were summarized.

