

April 27, 2010

LICENSEE: Arizona Public Service Company

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

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON  
APRIL 9, 2010, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION  
AND ARIZONA PUBLIC SERVICE COMPANY, CONCERNING DRAFT  
REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE PALO  
VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3, LICENSE  
RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission (the staff) and representatives of Arizona Public Service Company (the applicant) held a telephone conference call on April 9, 2010, to discuss and clarify the staff's draft requests for additional information (RAI) concerning the Palo Verde Nuclear Generating Station, Units 1, 2, and 3, license renewal application. The telephone conference call was useful in clarifying the intent of the staff's draft RAIs.

Enclosure 1 provides a listing of the participants, and Enclosure 2 contains a listing of the draft RAI questions discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

*/RA/*

Jeremy J. Susco, Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

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

Enclosures:  
As stated

cc w/encls: See next page

April 27, 2010

LICENSEE: Arizona Public Service Company  
FACILITY: Palo Verde Nuclear Generating Station, Units 1, 2, and 3  
SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON  
APRIL 9, 2010, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION  
AND ARIZONA PUBLIC SERVICE COMPANY, CONCERNING DRAFT  
REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE PALO  
VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3, LICENSE  
RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission (the staff) and representatives of Arizona Public Service Company (the applicant) held a telephone conference call on April 9, 2010, to discuss and clarify the staff's draft requests for additional information (RAI) concerning the Palo Verde Nuclear Generating Station, Units 1, 2, and 3, license renewal application. The telephone conference call was useful in clarifying the intent of the staff's draft RAIs.

Enclosure 1 provides a listing of the participants, and Enclosure 2 contains a listing of the draft RAI questions discussed with the applicant, including a brief description on the status of the items.

The applicant had an opportunity to comment on this summary.

***/RA/***

Jeremy J. Susco, Project Manager  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

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

Enclosures:  
As stated

cc w/encls: See next page

DISTRIBUTION: See next page

ADAMS Accession No. ML101060640

|        |          |             |             |             |
|--------|----------|-------------|-------------|-------------|
| OFFICE | LA:DLR   | PM:RPB2:DLR | BC:RPB2:DLR | PM:RPB1:DLR |
| NAME   | IKing    | LRegner     | DWrona      | JSusco      |
| DATE   | 04/21/10 | 04/22/10    | 04/27/10    | 04/27/10    |

OFFICIAL RECORD COPY

Memorandum to Arizona Public Service Company from J. Susco dated April 27, 2010

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON  
APRIL 9, 2010, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION  
AND ARIZONA PUBLIC SERVICE COMPANY, CONCERNING DRAFT  
REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE PALO  
VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3, LICENSE  
RENEWAL APPLICATION

DISTRIBUTION:

**HARD COPY:**

DLR RF

**E-MAIL:**

PUBLIC

RidsNrrDlr Resource  
RidsNrrDlrRpb1 Resource  
RidsNrrDlrRpb2 Resource  
RidsNrrDlrRarb Resource  
RidsNrrDlrRasb Resource  
RidsNrrDlrRapb Resource  
RidsNrrDlrRpob Resource  
RidsNrrDciCvib Resource  
RidsNrrDciCpnb Resource  
RidsNrrDciCsgb Resource  
RidsNrrDraAfpb Resource  
RidsNrrDraApla Resource  
RidsNrrDeEmcb Resource  
RidsNrrDeEeeb Resource  
RidsNrrDssSrxb Resource  
RidsNrrDssSbpb Resource  
RidsNrrDssScvb Resource  
RidsOgcMailCenter Resource  
RidsOpaMail Resource

-----  
L. Regner  
D. Drucker  
J. Susco  
R. Hall  
B. Mizuno, OGC  
R. Treadway, RIV  
G. Pick, RIV

**TELEPHONE CONFERENCE CALL  
PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3  
LICENSE RENEWAL APPLICATION**

**LIST OF PARTICIPANTS  
APRIL 9, 2010**

**PARTICIPANTS**

Jeremy Susco

Abdul Sheikh

Hans Ashar

Glenn Michael

Eric Blocher

Ahmed Ouaou

**AFFILIATIONS**

U.S. Nuclear Regulatory Commission (NRC)

NRC

NRC

Arizona Public Service Company

Strategic Teaming and Resource Sharing Alliance

Oak Ridge National Laboratory

**DRAFT REQUESTS FOR ADDITIONAL INFORMATION  
PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3  
LICENSE RENEWAL APPLICATION**

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Arizona Public Service Company (the applicant) held a telephone conference call on April 9, 2010, to discuss and clarify the following draft requests for additional information (RAI) concerning the Palo Verde Nuclear Generating Station (PVNGS), Units 1, 2, and 3, license renewal application (LRA).

**DRAFT RAI 4.5-3**

Background:

In LRA Section 4.5, the applicant provided Table 4.5-1, Tendon Regression Analysis Input Data. The table contains lift-off forces of individual tendons used in the regression analysis. The review of the table identified the following anomalies:

- a. Only the “shop end” force is provided for tendons H13-19, H21-04 (3<sup>rd</sup> year surveillance), V07 and V015.
- b. The lift-off force for tendon H21-04 was measured in the 3<sup>rd</sup> year surveillance and again in the 5<sup>th</sup> year.
- c. The Unit 3 dome horizontal tendon lift-off average forces are greater than the wall horizontal lift-off average forces; in some cases by nearly 100 kips (i.e., H13-45, H32-42, and H21-43).

Issue:

The anomalies in items (a) and (c) could influence the slope of regression analysis conducted to demonstrate that the predicted prestress forces remain above their respective minimum required values (MRVs) through the period of extended operation. In particular, the staff is concerned with the influence of the higher Unit 3 dome horizontal tendon forces on the combined wall and dome trend line (Figure 4.5-3), which shows the least margin. Item (b) may not satisfy IWL-2521, which requires that tendons examined during an inspection shall be selected on a random basis from a sample of tendons that have not been examined in earlier examinations.

Request:

The applicant is requested to explain the anomalies and confirm they have no impact on its conclusion that regression analysis trend lines indicate that tendon prestress will remain above the MRV through the period of extended operation.

**Discussion:** The applicant indicated that additional data for tendon H13-19 was submitted in its April 1, 2010 response to RAI 4.5-1. The staff agreed that the data had been provided. Therefore, the staff will remove “H13-19” from the draft and send this as a formal RAI.

### **Draft RAI B2.1.28-3**

#### Background:

In response to RAI B2.1.28-2, dated February 19, 2010, the applicant stated that the frequency of inspection for the ASME Section XI, Subsection IWL AMP is consistent with ASME Section XI Subsection IWL, paragraph IWL-2421, *Sites with Multiple Plants*. This paragraph allows inspection intervals of every ten years staggered, so that at least one unit is inspected every five years. Therefore, the applicant concludes that the existing program is consistent with ASME Section XI Subsection IWL and the Generic Aging Lessons Learned Report, and no exception is required.

#### Issue:

ASME Section III, Subsection IWL, Subarticle IWL-2421 allows the inspection frequency to increase to ten years for examinations required by IWL-2524 and IWL-2525. However, IWL-2524 and IWL-2525 requirements are for examination of tendon anchorage areas and corrosion protection medium and free water in the post-tensioning system, respectively. The requirements for concrete surface examinations are described in IWL-2521.

#### Request:

Provide the basis for containment concrete surface visual examination inspection frequency of ten years.

**Discussion:** The staff explained to the applicant the nature of the request. The applicant explained that what was missing from the request was an appropriate reference to IWL-2410, which the staff referenced in its verbal explanation over the phone. The staff agreed to revise the request to read:

#### Request:

Provide the basis for containment concrete surface visual examination inspection frequency of ten years. IWL-2410(a) states, "Concrete shall be examined in accordance with IWL-2510 at 1, 3, and 5 years following the completion of the containment Structural Integrity Test CC-6000 and every 5 years thereafter."

**DRAFT RAI 3.5.2.3-4**

Background:

For the component type “supports ASME 2 and 3,” LRA Table 3.5.2-14 credits the ASME Section XI Subsection IWF (B2.1.29) Program to manage loss of material for carbon and stainless steel components in 1) a raw water environment, and 2) a fuel oil environment.

The LRA states that these environments are not in NUREG-1801 for carbon and stainless steel components.

Issue:

The components in the environments identified above may have limited accessibility. It is not clear to the staff how the ASME Section XI Subsection IWF Program will inspect the component to ensure the aging effect is being managed.

Request:

Explain how the ASME Section XI Subsection IWF Program will manage the effect of aging on carbon and stainless steel components in 1) a raw water environment, and 2) a fuel oil environment.

**Discussion:** The applicant indicated that the question is clear. This question will be sent as a formal RAI.

Palo Verde Nuclear Generating Station,  
Units 1, 2, and 3

cc:

Mr. Steve Olea  
Arizona Corporation Commission  
1200 W. Washington Street  
Phoenix, AZ 85007

Mr. Douglas Kent Porter, Senior Counsel  
Southern California Edison Company  
Law Department, Generation Resources  
P.O. Box 800  
Rosemead, CA 91770

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
P.O. Box 40  
Buckeye, AZ 85326

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission  
612 E. Lamar Blvd., Suite 400  
Arlington, TX 76011-4125

Chairman  
Maricopa County Board of Supervisors  
301 W. Jefferson, 10th Floor  
Phoenix, AZ 85003

Mr. Aubrey V. Godwin, Director  
Arizona Radiation Regulatory Agency  
4814 S. 40th Street  
Phoenix, AZ 85040

Mr. Ron Barnes, Director  
Regulatory Affairs  
Palo Verde Nuclear Generating Station  
Mail Station 7636  
P.O. Box 52034  
Phoenix, AZ 85072-2034

Mr. Dwight C. Mims, Vice President  
Regulatory Affairs and Plant Improvement  
Palo Verde Nuclear Generating Station  
Mail Station 7605  
P.O. Box 52034  
Phoenix, AZ 85072-2034

Mr. John C. Taylor, Director, Nuclear  
Generation  
El Paso Electric Company  
340 E. Palm Lane, Suite 310  
Phoenix, AZ 85004

Mr. James Ray  
Public Service Company of New Mexico  
2401 Aztec NE, MS Z110  
Albuquerque, NM 87107-4224

Mr. Geoffrey M. Cook  
Southern California Edison Company  
5000 Pacific Coast Highway, Bldg. D21  
San Clemente, CA 92672

Mr. Robert Henry  
Salt River Project  
6504 E. Thomas Road  
Scottsdale, AZ 85251

Mr. Jeffrey T. Weikert  
Assistant General Counsel  
El Paso Electric Company  
Mail Location 167  
123 W. Mills  
El Paso, TX 79901

Mr. Eric Tharp  
Los Angeles Department of Water & Power  
Southern California Public Power Authority  
P.O. Box 51111, Room 1255-C  
Los Angeles, CA 90051-0100

Mr. Brian Almon  
Public Utility Commission  
William B. Travis Building  
P.O. Box 13326  
1701 N. Congress Avenue  
Austin, TX 78701-3326

Mr. Randall K. Edington  
Executive Vice President  
Nuclear/CNO  
Arizona Public Service Company  
P.O. Box 52034, Mail Station 7602  
Phoenix, AZ 85072-2034