March 6, 2007

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

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 - REQUEST FOR ADDITIONAL INFORMATION REGARDING TECHNICAL SPECIFICATION 3.1.6, "SHUTDOWN CONTROL ELEMENT ASSEMBLY (CEA) INSERTION LIMITS," AMENDMENT SUBMITTAL (TAC NOS. MD2650, MD2651, AND MD2652)

Dear Mr. Edington:

By letter dated July 20, 2006, Arizona Public Service Company, submitted a license amendment request for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The request is to revise Technical Specification 3.1.6, "Shutdown Control Element Assembly (CEA) Insertion Limits," and associated Limiting Condition for Operation 3.6.1 and Surveillance Requirement 3.1.6.1. The proposed new limit would require CEAs to be withdrawn to $\geq$147.75 inches, instead of the current limit of $\geq$144.75 inches.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information provided and determined that additional information is required in order to complete the evaluation. The enclosed request for additional information was discussed with Glenn Michael of your staff on January 25, 2007. As agreed upon, the NRC staff is expecting a response within 60 days of the date of this letter.

If you have any questions, please contact me at 301-415-3062.

Sincerely,

/RA/

Mel B. Fields, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Enclosure: Request for Additional Information

cc: See next page

March 6, 2007

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

SUBJECT: PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3 - REQUEST FOR ADDITIONAL INFORMATION REGARDING TECHNICAL SPECIFICATION 3.1.6, "SHUTDOWN CONTROL ELEMENT ASSEMBLY (CEA) INSERTION LIMITS," AMENDMENT SUBMITTAL (TAC NOS. MD2650, MD2651, AND MD2652)

Dear Mr. Edington:

By letter dated July 20, 2006, Arizona Public Service Company, submitted a license amendment request for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The request is to revise Technical Specification 3.1.6, "Shutdown Control Element Assembly (CEA) Insertion Limits," and associated Limiting Condition for Operation 3.6.1 and Surveillance Requirement 3.1.6.1. The proposed new limit would require CEAs to be withdrawn to ≥147.75 inches, instead of the current limit of ≥144.75 inches.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information provided and determined that additional information is required in order to complete the evaluation. The enclosed request for additional information was discussed with Glenn Michael of your staff on January 25, 2007. As agreed upon, the NRC staff is expecting a response within 60 days of the date of this letter.

If you have any questions, please contact me at 301-415-3062.

Sincerely,
/RA/
Mel B. Fields, Senior Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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

Enclosure: Request for Additional Information

DISTRIBUTION:

PUBLIC	RidsNrrLAJBurkhardt	RidsNrrDorlDpr
LPLIV r/f	RidsAcrsAcnwMailCenter	
RidsNrrDorlLpl4	RidsRgn4MailCenter	
RidsNrrPMMMarkley	RidsOgcRp	
RidsNrrPMMFields	MPaniker, SRSB	

ADAMS Accession No.: ML070590557 NRR-088

OFFICE	NRR/LPL4/PM	NRR/LPL4/PM	NRR/LPL4/LA	NRR/LPL4/BC
NAME	MMarkley:sp	MFields	LFeizollahi	DTerao
DATE	3/5/07	3-5-07	3/5/07	3/6/07

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3

DOCKET NOS. STN 50-528, STN 50-529, AND STN 50-530

By letter dated July 20, 2006, Arizona Public Service Company, submitted a license amendment request for the Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The request is to revise Technical Specification (TS) 3.1.6, "Shutdown Control Element Assembly (CEA) Insertion Limits," and associated Limiting Condition for Operation 3.6.1 and Surveillance Requirement 3.1.6.1. The proposed new limit would require CEAs to be withdrawn to ≥147.75 inches, instead of the current limit of ≥144.75 inches.

The staff has reviewed the information provided and determined that the following additional information is required in order to complete the evaluation.

1. Section 4.0, TECHNICAL ANALYSIS, Safety Analysis: (Paragraph 1)

Please identify the "Specific parameters" that were analyzed to determine if, with the rods positioned at the new limit, the power distribution in the core was still within the assumptions made in the safety analyses. Paragraph 1 states that, "[t]o assess the effect control rod position would have on the parameters with the rods positioned at the new limit, several events and specific parameters were analyzed. The events were chosen because of their sensitivity to rod position." What transients/accidents, if any, other than steam line break and control rod ejection were analyzed? Identify the specific parameters, and the assumptions made in the safety analyses.

2. Section 4.0, TECHNICAL ANALYSIS, Safety Analyses: (Paragraph 2)

Paragraph 2 states that, "[t]he checklist has three limiting parameters for rod worth. Each of the three parameters applies to a different power level and cycle length." Please explain these points and the subsequent statements that are made in Paragraph 2.

3. Section 4.0, TECHNICAL ANALYSIS: (Paragraph 3)

The second sentence states that, "[t]he case having the smallest difference between the calculated value and the limiting value was selected." Also, the fourth sentence states that, "[t]he results of the simulation found a reduction in the margin to be less than one half of 1%." Please identify the parameters that are being referred to in each of these statements.

4. TS Bases, Page B 3.1.6-4

Please provide clarifying information (e.g., title, etc.) for proposed Reference Number 4, Calculation 13-JC-SF-0202.

Palo Verde Nuclear Generating Station
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
Harris Tower & Pavillion
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

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

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

Mr. Scott Bauer, Acting General Manager
Regulatory Affairs and
Performance Improvement
Palo Verde Nuclear Generating Station
Mail Station 7636
P.O. Box 52034
Phoenix, AZ 85072-2034

Mr. Matthew Benac
Assistant Vice President
Nuclear & Generation Services
El Paso Electric Company
340 East Palm Lane, Suite 310
Phoenix, AZ 85004

Mr. John Taylor
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 Hwy Bldg N50
San Clemente, CA 92672

Mr. Robert Henry
Salt River Project
6504 East 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. John Schumann
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 North Congress Avenue
Austin, TX 78701-3326

Ms. Karen O'Regan
Environmental Program Manager
City of Phoenix
Office of Environmental Programs
200 West Washington Street
Phoenix AZ 85003