



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

November 30, 2011

Mr. Randall K. Edington  
Executive Vice President Nuclear/  
Chief Nuclear Officer  
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 60-DAY  
RESPONSE TO NRC BULLETIN 2011-01, "MITIGATING STRATEGIES" (TAC  
NOS. ME6462, ME6463, AND ME6464)

Dear Mr. Edington:

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The purpose of the bulletin was to obtain a comprehensive verification that licensees' mitigating strategies to maintain or restore core cooling, spent fuel cooling, and containment following a large explosion or fire were compliant with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(hh)(2). The bulletin requested information on licensees' 10 CFR 50.54(hh)(2) mitigating strategies in light of the recent events at Japan's Fukushima Daiichi facility to determine if (1) additional assessment of program implementation is needed, (2) the current inspection program should be enhanced, or (3) further regulatory action is warranted.

The bulletin required two sets of responses pursuant to the provisions of 10 CFR 50.54(f). The first responses were due 30 days after issuance of the bulletin. By letter dated June 10, 2011 (ADAMS Accession No. ML11173A060), Arizona Public Service Company (APS, the licensee) provided a response to the first set of questions for Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The second responses were due 60 days after issuance of the bulletin. By letter dated July 11, 2011 (ADAMS Accession No. ML11200A313), APS responded to this second set of questions. Portions of the letter dated July 11, 2011, contain sensitive unclassified non-safeguards information and, accordingly, are withheld from public disclosure.

The NRC staff has reviewed the information provided in your letters dated June 10 and July 11, 2011, and determined additional information is needed for the NRC staff to complete its review of the 60-day response to the bulletin. Please respond to the enclosed request for additional information within 30 days of the date of this letter.

R. Edington

- 2 -

If you have any questions, please contact me at (301) 415-3016 or via e-mail at [Balwant.Singal@nrc.gov](mailto:Balwant.Singal@nrc.gov).

Sincerely,

*Lauren Kate Gibson for*

Balwant K. Singal, 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:  
As stated

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION  
NRC BULLETIN 2011-01, "MITIGATING STRATEGIES  
ARIZONA PUBLIC SERVICE COMPANY  
PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2, AND 3  
DOCKET NOS. STN 50-528, 50-529, AND 50-530

On May 11, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Bulletin 2011-01, "Mitigating Strategies" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111250360), to all holders of operating licenses for nuclear power reactors, except those that have permanently ceased operation and have certified that fuel has been removed from the reactor vessel. The purpose of the bulletin was to obtain a comprehensive verification that licensees' mitigating strategies to maintain or restore core cooling, spent fuel cooling, and containment following a large explosion or fire were compliant with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(hh)(2).

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The NRC staff has reviewed the information provided in your letters dated June 10 and July 11, 2011, and determined additional information is needed for the NRC staff to complete its review of the 60-day response to the bulletin.

1. Please describe in detail how the licensee ensures there is sufficient fuel for the pumping source when needed.

The bulletin requested that each licensee describe in detail the maintenance of equipment supporting the mitigating strategies to ensure that it will be functional when needed. The licensee's response did not specify the activities performed to ensure that sufficient fuel would be available for the pumping source so that it will be functional when needed.

Enclosure

2. Please identify the minimum inventory frequency for equipment needed for the mitigating strategies not specifically identified in response to the bulletin. Alternatively, please describe the inventory frequency for firefighter turnout gear needed to support the mitigating strategies.

The bulletin requested that each licensee describe in detail the controls for ensuring equipment supporting the mitigating strategies will be available when needed. Firefighter turnout gear, tools, and instruments are generally needed to implement the mitigating strategies. The NRC staff found that tools and instruments are specifically listed in the licensee's response, but the licensee did not specify that firefighter turnout gear is inventoried.

R. Edington

- 2 -

If you have any questions, please contact me at (301) 415-3016 or via e-mail at [Balwant.Singal@nrc.gov](mailto:Balwant.Singal@nrc.gov).

Sincerely,

/RA by Lauren K. Gibson for/

Balwant K. Singal, 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

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**ADAMS Accession No. ML113110205**

OFFICE	NRR/DORL/LPL4/PM	NRR/DORL/LPL4/LA	NRR/DPR/PGCB/PM
NAME	BSingal	JBurkhardt	BPurnell
DATE	11/23/11	11/22/11	11/23/11
OFFICE	NRR/DPR/PGCB/BC	NRR/DORL/LPL4/BC	NRR/DORL/LPL4/PM
NAME	SRosenberg	MMarkley	BSingal (LGibson for)
DATE	11/23/11	11/30/11	11/30/11

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