



Palo Verde Nuclear
Generating Station

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102-05304-CDM/TNW/GAM
July 9, 2005

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Units 1, 2 and 3
Docket Nos. STN 50-528, 50-529, and 50-530
Response to NRC Request for Additional Information Related to
Generic Letter 2004-02, "Potential Impact of Debris Blockage on
Emergency Recirculation During Design Basis Accidents at
Pressurized-Water Reactors"**

By letter dated June 2, 2005, the NRC provided a request for additional information (RAI) related to Arizona Public Service Company's (APS) March 4, 2005 response to Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." The NRC RAI and APS' responses are provided in Enclosure 1. A list of regulatory commitments made in this letter is provided in Enclosure 2.

If you have any questions, please contact Thomas N. Weber at (623) 393-5764.

Sincerely,

CDM/TNW/GAM

Enclosures: 1. APS' Response to NRC RAI Related to Generic Letter 2004-02
2. List of Regulatory Commitments

cc: B. S. Mallett NRC Region IV Regional Administrator
M. B. Fields NRC NRR Project Manager
G. G. Warnick NRC Senior Resident Inspector for PVNGS

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Enclosure 1

Arizona Public Service Company's Response to June 2, 2005 NRC Request for Additional Information (RAI) Related to Generic Letter 2004-02

NRC RAI Related to Generic Letter (GL) 2004-02

By letter dated March 4, 2005, Arizona Public Service Company (the licensee) provided the 90-day response to U. S. Nuclear Regulatory Commission (NRC) Generic Letter (GL) 2004-02 for Palo Verde Nuclear Generating Station, Units 1, 2, and 3. The GL requested that addressees perform an evaluation of the emergency core cooling system and containment spray system recirculation functions in light of the information provided in the GL and, if appropriate, take additional actions to ensure system function. Additionally, addressees were requested to submit to the NRC the information specified in the GL. The staff has completed its preliminary review of your response and has determined it needs the following additional information to complete our review:

In your 90-day response to GL 2004-02, you indicated that you intend to use future test results, industry guidance, and NRC guidance to account for chemical precipitants in your evaluation and their availability will impact the schedule for performing an evaluation. The cooperative NRC-Electric Power Research Institute tests in progress at the University of New Mexico are designed to determine if chemical effects occur, but are not designed to measure head loss associated with any chemical effects. The staff notes that some chemical effects have been observed in the initial three tests.

In your 90-day response to GL 2004-02, you also indicated that you intend to use industry owners' group guidance and component manufacturer data to evaluate long-term performance degradation of downstream susceptible components caused by debris-laden fluid and their availability will impact the schedule for performing an evaluation.

For both of these issues, you stated the evaluation may occur after the September 1, 2005, response due date, depending on the schedule for testing and the availability of industry guidance. This is contrary to the information request in GL 2004-02, which requests that chemical and downstream effects be addressed in the September 1, 2005, response. This delay is also contrary to the staff's position that there are sufficient bases to address sump vulnerability to chemical effects and that the September response will be incomplete if the evaluation is incomplete, the design is not complete, or there is no schedule for upgrades. In this light, please discuss your plans and schedule for evaluating chemical effects and the longterm downstream effects. In addition, please discuss any plans for performing testing to support your evaluation of these effects.

Arizona Public Service Company's (APS') Response

APS' plans and schedule for evaluating chemical effects and the long-term downstream effects:

Evaluations of the chemical effects and the long-term downstream effects will be completed and addressed in APS' response to Generic Letter 2004-02 by September 1, 2005, in accordance with the GL.

APS' discussion of any plans for performing testing to support the evaluation of chemical effects and the long-term downstream effects:

APS' response to Generic Letter 2004-02 to be submitted to the NRC by September 1, 2005, will discuss the evaluation methodology employed to address chemical effects and long-term downstream effects in the baseline evaluation. Confirmatory testing needs, if identified, will be included with testing plans and schedule in the submittal.

Enclosure 2

Regulatory Commitments

The following table identifies those new actions committed to by APS in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to Thomas N. Weber at (623) 393-5764.

REGULATORY COMMITMENT	DUE DATE
Evaluations of the chemical effects and the long-term downstream effects will be completed and addressed in APS' response to Generic Letter 2004-02 by September 1, 2005, in accordance with the GL.	September 1, 2005
APS' response to Generic Letter 2004-02 to be submitted to the NRC by September 1, 2005, will discuss the evaluation methodology employed to address chemical effects and long-term downstream effects in the baseline evaluation. Confirmatory testing needs, if identified, will be included with testing plans and schedule in the submittal.	September 1, 2005