Palo Verde Nuclear
Generating Station

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102-05095-CDM/SAB/RJR
April 23, 2004

U.S. Nuclear Regulatory Commission
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References: 1. Letter 102-05031-GRO/SAB/RJR, "Relief Request No. 24 – Request for Relaxation of NRC Order EA-03-009, Section IV.C.(1)(b) Requirements for the Reactor Head Vent Nozzle," dated January 14, 2004.

2. Letter 102-05070-CDM/SAB/RJR, "Relief Request No. 24 – Request for Addition Information," dated March 11, 2004.

3. Letter 102-05084-GRO/SAB/RJR, "Relief Request No. 24 – Response to Second Request for Additional Information," April 9, 2004.

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1
Docket No. STN 50-528
Additional Information for the Request for the Relaxation of the Reactor Vessel Head Vent Examination

In Reference 1, Arizona Public Service Company (APS) requested relaxation from NRC Order EA-03-009 for the reactor head vent nozzle. In References 2 and 3, APS provided responses to NRC questions regarding the relaxation. In a telephone conversation on April 22 the NRC requested additional information regarding the estimated radiological dose that would be incurred if the examination was performed during the current refueling outage (Unit 1 eleventh refueling outage--U1R11).

APS has performed a review of the steps required to perform an examination of the reactor head vent nozzle using the current radiological condition in Unit 1. This inspection would be performed without reliance on the previously submitted relaxation to the NRC Order EA-03-009. The results of the review determined that the radiological dose that would be incurred for this inspection during U1R11, including the manual actions necessary to obtain an acceptable examination, would be approximately 80 to 100 man rem.

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If the relaxation is granted for U1R11, APS would pursue the development of engineered tooling and implementation techniques and plan the necessary activities to save a significant amount of radiation exposure during future examinations. It is anticipated that special tooling and mockups could be developed along with the necessary changes to complete the examination in the fall outage (Unit 3, eleventh refueling outage--U3R11) and potentially incur a radiological dose of less than an estimated 25 man rem. The savings in dose is estimated to be substantial due to this development of engineered tooling and implementation techniques that would enable some of the tasks to be performed remotely instead of manually in close proximity to the high radiation fields of the reactor vessel head. This would also enable APS to make the necessary changes to ensure an examination of the reactor vessel head vent nozzle can be performed in accordance with the NRC Order without reliance on a relaxation similar to that submitted in Reference 1. This also allows APS to thoroughly examine the modification alternatives to minimize stresses at the head vent nozzle.

This request is for U1R11 only. APS requests review and approval of this request for Unit 1 prior to Mode 2 entry from the Unit 1 refueling outage. Mode 2 entry is currently scheduled for May 1, 2004.

This letter contains one new commitment to develop the special tooling and techniques and make the necessary changes to ensure an examination of the reactor vessel head vent nozzle can be performed in accordance with the NRC Order without reliance on a relaxation similar to that submitted in Reference 1. Should you have any questions, please contact Thomas N. Weber at (623) 393-5764.

Sincerely,

CDM/SAB/RJR/

cc:

J. E. Dyer	(w/Enclosure)
B. S. Mallett	(w/Enclosure)
M. B. Fields	(w/Enclosure)
N. L. Salgado	(w/Enclosure)