



Palo Verde Nuclear  
Generating Station

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

- References:
1. Letter 102-03554, dated November 27, 1995, from W. L. Stewart, APS to USNRC.
  2. Letter 102-03573, dated December 20, 1995, from W. L. Stewart, APS to USNRC.
  3. Letter 102-03987, dated August 1, 1997, from W. E. Ide, APS to USNRC.

Dear Sirs:

**Subject:** Palo Verde Nuclear Generating Station (PVNGS)  
Units 1, 2, and 3  
Docket Nos. STN 50-528/529/530  
Withdrawal from the Risk-Informed In-service Testing Pilot Plant  
Effort.

In References 1 and 2, Arizona Public Service Company (APS) submitted an exemption request to the United States Nuclear Regulatory Commission (NRC) as part of a pilot plant effort for risk-informed in-service testing (RI-IST). During the course of work on the third request for additional information (RAI), APS informed the NRC in Reference 3 of our intent to suspend work in this area due to competing work priorities and limited resources. At that time, APS committed to provide the staff with a schedule for providing a complete response to the third RAI by mid-1998.

APS wishes to withdraw the aforementioned exemption request. We have made this decision based on an evaluation of the potential safety and cost benefits of a RI-IST program vs. other risk-informed applications. Our conclusion is that our resources are best spent at this time pursuing other risk-informed applications. Specifically, we have determined our current priorities are the pursuit of further Allowed Outage Time extensions and development of enhancements to our program for assessing on-line risk when equipment is removed from service to ensure compliance with the proposed changes to the Maintenance Rule. We continue to believe that risk-informed, performance-based regulation will result in overall increases in safety and reductions in costs, but our assessment of RI-IST is that the safety and cost benefits are marginal at best.

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APS began to have doubts as to the actual safety or cost benefit from the implementation of a RI-IST program subsequent to the publishing of the draft Regulatory Guides in mid-1997. Our concerns were communicated to the NRC on several occasions via industry working group meetings, telephone and written correspondence. We continue to believe that a RI-IST program, as described in the Regulatory Guides, would have little safety or cost benefit.

The safety benefit from a RI-IST program was envisioned to result from two major factors. These are the addition of components to the program that were found to be High Safety Significant Components (HSSC) but not part of the traditional IST scope and the possible implementation of enhanced testing on HSSC components that would enhance their reliability. At PVNGS only one component was found to be HSSC and not part of the traditional IST scope. This does not represent a significant increase in safety. Although the implementation of enhanced test methods would be significant in theory, in practice enhanced testing is already performed on many IST components through the PVNGS Predictive Maintenance Program and valve testing programs. Thus no actual safety benefit would be realized at PVNGS.

The cost benefit from a RI-IST program was envisioned to result from reduced testing on Low Safety Significant Components (LSSC). We believe implementing RI-IST may result in a cost increase. This belief is based on the current structure of Regulatory Guide 1.175, "An Approach for Plant-Specific, Risk-Informed, Decisionmaking: Inservice Testing," August 1998, which requires:

1. Continued use of prescriptive, NRC approved testing methodologies, and
2. A performance monitoring and corrective action process that exceeds both traditional program requirements and current Maintenance Rule requirements.

Regulatory Guide 1.175 implements a risk-informed approach to IST through the identification of HSSCs and LSSCs. It implements a performance-based approach through the development of component level performance criteria which is based on the reliability assumptions in the PRA. However, the Regulatory Guide also continues with a compliance-based approach to regulation by requiring continued compliance with NRC approved test methods. This approach results in an overall increase in the regulatory requirements, contrary to the objectives of a true risk-informed, performance-based approach. The performance monitoring and corrective action requirements outlined in the Regulatory Guide are a good example of the additional requirements. The development of component-specific reliability requirements and monitoring performance to these requirements, along with a periodic reassessment of the program, is not required by any current NRC program. Requiring a root cause of failure for every HSSC and all LSSCs where the apparent cause of failure may contribute to common cause failure is another example of additional requirements.

These requirements, above and beyond the effort necessary to develop the initial analysis and submittal, would result in a continuing burden of program administration that would negate the benefits from reduced testing. This condition is exacerbated when the RI-IST program is evaluated against our current relief requests to apply code case OMN-1 for motor operated valves and Appendix II check valve condition monitoring. We believe that implementation of these relief requests, which contain elements of RI-IST, results in a substantial portion of the benefits of a full RI-IST program, without the additional administrative burden. Based on these stated concerns, APS hereby withdraws the RI-IST exemption request.

We continue to believe that a RI-IST program, properly structured with performance-based versus compliance-based methodology, would be both cost and safety beneficial to the industry. Such a program would focus on the definition of program scope, development of performance monitoring criteria and application of an appropriate corrective action program. It would leave to the licensee's discretion the details of the test program including test intervals and testing methodologies. A program structured in this manner would allow licensees to combine redundant aspects of their predictive maintenance and testing programs that are currently administered separately. It would also allow licensees to retain the flexibility to apply new test technology as it is developed and maintain a leading edge test program. The performance-monitoring program would continue to assure that plant equipment is maintained in an acceptable condition to maintain or improve the current level of nuclear safety.

In accordance with the provisions of 10 CFR 170.11(b)(1), APS requests an exemption from the 10 CFR Part 170 fees associated with the RI-IST pilot plant effort and believes a refund of fees paid to date is appropriate. APS' involvement was a first-of-a-kind effort to support the NRC's planned generic regulatory improvement by providing input for an approach to RI-IST. APS believes information submitted to date by APS was used more for the development of an acceptable framework for this risk-informed application than for approval of the exemption, which we submitted. The development of the RI-IST programs provides guidance to power reactor licensees and the NRC staff on an acceptable approach for utilizing risk information to support plant-specific changes to the current licensing basis for in-service testing programs. The program has the potential to optimize the use of industry and NRC resources and to continue to assure adequate protection of the public health and safety. Based on the foregoing, APS requests a refund of \$72,687 in fees paid to date for the review of all PVNGS submittals and RAI responses associated with the RI-IST pilot plant effort (TAC Nos. M94139, M94140, and M94141).

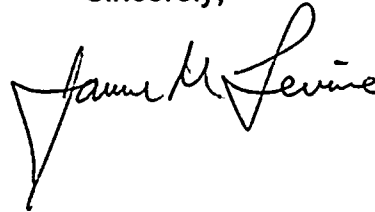
APS believes our efforts were beneficial to the NRC staff. We enjoyed working with the staff on this project and believe a framework was established to promote the use of risk-informed applications. We strongly believe, however, further enhancements are needed to establish a risk-informed methodology that is beneficial to both safety and cost. If the staff feels that additional discussion of the basis for our withdrawal would be beneficial

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to their future pursuit of RI-IST with the industry, we would be happy to meet to discuss this issue in more detail.

Please contact Mr. Scott Bauer at (602) 393-5978 if you have any questions. This letter does not make any commitments to the NRC.

Sincerely,

A handwritten signature in cursive script, appearing to read "James M. Levine". The signature is written in dark ink and is positioned to the right of the word "Sincerely,".

Enclosure

JML/SAB/RKB/mah

cc: E. W. Merschoff  
M. B. Fields  
J. H. Moorman