

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
GENERIC IMPLICATIONS OF SALEM ATWS EVENT
GENERIC LETTER 83-28, ITEMS 3.2.1 AND 3.2.2
ARIZONA PUBLIC SERVICE COMPANY, ET AL.
PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2 AND 3
DOCKET NOS. STN 50-528, 50-529 AND 50-530

I. INTRODUCTION

On February 25, 1983, during startup of the Salem Unit 1 Nuclear Plant, both circuit breakers in the Reactor Trip System failed to open automatically upon receipt of a valid trip signal. As a result of that event, the NRC's Office of Inspection and Enforcement issued IE Bulletin 83-01 which described the event and requested specified prompt corrective and preventive actions by licensees. As the cause and ramifications of the event were more clearly developed, the NRC's Office of Nuclear Reactor Regulation issued on July 8, 1983, Generic Letter 83-28, "Required Actions Based on Generic Implications of Salem ATWS Events." This letter addressed issues related to reactor trip system reliability and general management capability. The letter was sent to all licensees of operating reactors, applicants for operating licenses and holders of construction permits.

One of the areas of reactor trip system reliability considered in Generic Letter 83-28 (GL 83-28), is that of post-maintenance testing of safety-related components other than those in the reactor trip system. This is identified in GL 83-28 as Items 3.2.1 and 3.2.2. This evaluation addresses the acceptability of the response to these items provided by Arizona Public Service Company, et al. (APS) for the Palo Verde Nuclear Generating Station, Units 1, 2 and 3 (PVNGS).

II. EVALUATION

Items 3.2.1 and 3.2.2 of GL 83-28 state as follows:

- "1. Licensees and applicants shall submit a report documenting the extending of test and maintenance procedures and Technical Specifications review to assure that post-maintenance operability testing of all safety-related equipment is required to be conducted and that the testing demonstrates that the equipment is capable of performing its safety functions before being returned to service."
- "2. Licensees and applicants shall submit the results of their check of vendor and engineering recommendations to ensure that any appropriate test guidance is included in the test and maintenance procedures or Technical Specifications, where required."

By letter dated November 3, 1983, APS responded to a number of GL 83-28 items, including Items 3.2.1 and 3.2.2. Additional information relating to these items was included in the APS letters of December 18, 1984 and April 19, 1985.

Regarding Item 3.2.1, the APS letter of November 3, 1983 stated a review of all safety-related equipment test and maintenance procedures which had been approved at that time, indicated that post-maintenance testing to assure operability was included. The letter also stated all procedures still in draft form will have retest requirements included, as required.

The APS letter of April 19, 1985, committed to completion of the review and approval of all required test and maintenance procedures for safety-related equipment covered by Item 3.2 prior to startup from the first refueling outage.

Regarding Item 3.2.2, (incorporation of vendor recommendations in test and maintenance procedures), the APS letter of November 3, 1983, stated a review of all approved Test and Maintenance procedures indicated the latest vendor and engineering recommendations available to APS had been incorporated. APS also stated all procedures still in draft will meet the same requirements. Regarding final completion of this item, the APS letter of April 19, 1985, stated - as for the preceding item - the review and approval of procedures would be completed prior to startup from the first refueling outage.

As for the adequacy of the completion date proposed by APS for this item, this completion target was previously found acceptable by the staff upon issuance of the Operating License for PVNGS Unit 1 (License Condition 2.C.(10)).

III. CONCLUSION

Based on confirmation by APS that all test and maintenance procedures for safety-related equipment (other than the Reactor Trip System) include, or prior to startup from the first refueling outage will include, requirements for post-maintenance testing that assures equipment operability, we conclude APS is in the process of satisfying for PVNGS, the actions requested by Item 3.2.1 of Generic Letter 83-28. Accordingly, this item is closed.

Based on confirmation by APS that prior to startup from the first refueling outage, the latest vendor and engineering recommendations will have been incorporated in the test and maintenance procedures for safety-related equipment other than the Reactor Trip System, as appropriate, we conclude APS is in the process of satisfying for PVNGS, the actions requested by Item 3.2.2 of Generic Letter 83-28. Accordingly, this item is closed.

Date:

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