ARIZONA PUBLIC SERVICE COMPANY
P. O. BOX 21666 · PHOENIX, ARIZONA 85036

February 26, 1981
ANPP-17368-BSK/JAR

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U. S. Nuclear Regulatory Commission
Region V
Walnut Creek Plaza - Suite 202
1990 North California Boulevard
Walnut Creek, California 94596

Attention: Mr. G. S. Spencer, Chief
Reactor Construction and
Engineering Support Branch

Subject: Interim Report No. 2
A 50.55(e) Potentially Reportable Deficiency Relating to
Loose Bushings on ITT Grinnell Sway Struts
File: 81-019-026; D.4.33.2

Reference: (1) Telephone Conversation between R. Haynes and B. S. Kaplan on November 20, 1980 (DER 80-36)

(2) Interim Report ANPP-16804-BSK/JAR, dated December 1, 1980

Dear Sir:

The NRC was notified of a potentially reportable deficiency in the referenced telephone conversation. Reference (2) transmitted an Interim Report which estimated completion of the investigation on March 1, 1981.

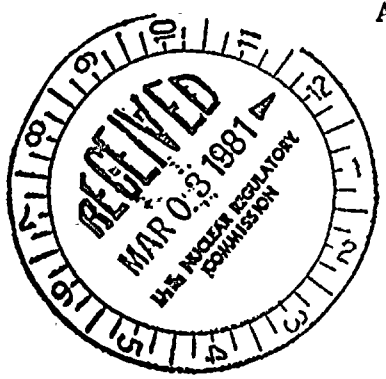
Due to the extensive investigation and evaluation required, a second Interim Report is attached. It is now expected that this information will be finalized by July 15, 1981, at which time a complete report will be submitted.

Very truly yours,

E. E. Van Brunt, Jr.
APS Vice President
Nuclear Projects
ANPP Project Director

EEVBJr/BSK:skc

Attachment



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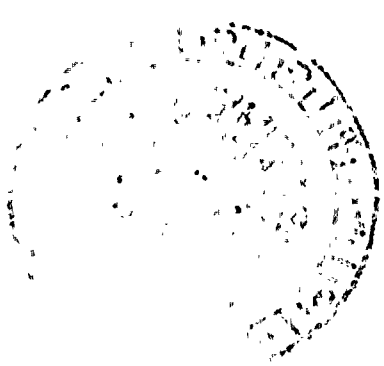

cc: Victor Stello, Jr., Director
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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INTERIM REPORT NO. 2

POTENTIAL REPORTABLE DEFICIENCY

ARIZONA PUBLIC SERVICE COMPANY (APS)

PVNGS UNITS #1 AND #2

I. Potential Problem

Project receipt of Bechtel's Quality Assurance Bulletin 80-30 and Problem Alert TPM-P-80-6, October 13, 1980, which referenced a 10CFR Part 21 Report filed by Bechtel's Ann Arbor office, indicated that ITT Grinnell manufactured sway struts, snubbers and shock suppressors may have been found to contain partially or totally disengaged self-aligning rod end bushings. This condition may be considered safety-related since if left uncorrected the condition of total disengagement during a seismic event may result in piping and/or piping welds being overstressed due to movement of the piping system.

Activity to date has established the following facts concerning this potential problem:

1. ITT Grinnell does not acknowledge any problems to exist with any of their products and claim that none have been reported to them.

2. This project has not been able to obtain specific data on any ITT Grinnell product deficiency from other projects.

3. Project surveillance activity to date has indicated that two sway struts (3-ED-401-H-004) and (3-ED-176-H-013) were found in the material receiving area with the bushing disengaging and not staked; however, this condition alone does not constitute a safety significant condition.

4. A review of the situation indicates that when in the installed position, the bushing is held captive by the rear bracket and the spacer washers or the clamp and spacer washers at the pipe clamp end. In most cases, these conditions preclude the possibility of total disengagement. However, due to tolerance conditions, it is possible at the pipe clamp end to have sufficient space between the bushing and the clamp for a loose bushing to become totally disengaged.

5. Lateral movement of the bushing within the housing is not considered a deficiency as long as the bushing cannot become totally disengaged.

6. The greatest possibility of bearing disengagement or loss occurs during shipping, handling and installation.

7. ITT Grinnell instituted an informal staking program in October, 1978 for their Figure 211 sway struts and Figure 306/307 shock arrestors whereby the bushing was staked when the Bechtel in-house inspector determined that a bushing appeared to be "loose". Both the inspection criteria and the staking repair operation were performed in a subjective manner. In November, 1980, a formal staking procedure was implemented whereby 100% of the production of the Figure 200, 201, 211, 306 and 307 products were staked.

8. ITT Grinnell pruchases the other snubber and shock suppressor body assemblies from Pacific Scientific, Incorporated. These assemblies include the self-aligning bushings from Pacific Scientific. To date, this project has not identified any loose or disengaging bushings on any Pacific Scientific product because this supplier has used a machine staking operation on 100% of its production.

II. Approach To and Status Of Proposed Resolution

Bechtel will verify whether installed ITT Grinnell sway struts have or could potentially have disengaged bushings by performing a 100% visual inspection of the sway struts shipped to the jobsite prior to November, 1978. The installed sway struts and shock arrestors will be visually inspected for existence of bushings and the rod end will be checked for any possibility of bushing disengagement within the pipe clamp assembly. This inspection would include all the Figure 211 sway struts and Figure 306/307 mechanical shock arrestors received at the jobsite which were not subject to the informal or formal staking programs implemented by ITT Grinnell. The results of this detailed inspection (60 products) will indicate if a reportable condition exists and form the basis of the final report.

III. Projected Completion of Corrective Action and Submittal Date of the Final Report

The inspection of the ITT Grinnell products manufactured and shipped prior to November, 1978 will be completed by June 15, 1981. The Final Report will be submitted by July 15, 1981.