

50.55(e) Report

NRC

ARIZONA



PUBLIC SERVICE COMPANY

STA. 3003

P.O. BOX 21666 - PHOENIX, ARIZONA 85036

November 20, 1981  
ANPP-19520-GHD/BSK

U. S. Nuclear Regulatory Commission  
Region V  
Creekside Oaks Office Park  
1450 Maria Lane - Suite 210  
Walnut Creek, California 94596-5368

Attention: Mr. B. H. Faulkenberry, Chief  
Reactor Construction and  
Engineering Support Branch

Subject: Interim Report, Revision 1 - DER 81-10  
A 50.55(e) Potentially Reportable Deficiency Relating  
to Hardened Washers Not Used As Required by ASME Code  
File: 81-019-026  
D.4.33.2

Reference: (A) Telephone Conversation between J. Eckhardt and  
C. T. Lewis on May 12, 1981

(B) ANPP-18183, dated June 9, 1981 (Interim Report)

Dear Sir:

The NRC was notified of a potentially reportable deficiency in  
Reference (A) and an Interim Report was transmitted by Reference  
(B). At that time, it was estimated that a Final Report would be  
available by December 15, 1981.

Due to the extensive investigation and evaluation required, a revised  
Interim Report is attached. It is now expected that this information  
will be finalized by February 26, 1982, at which time a complete report  
will be submitted.

Very truly yours,

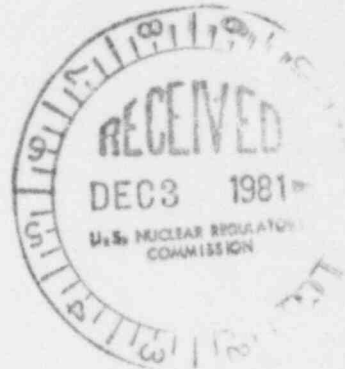
E. E. Van Brunt, Jr.  
APS Vice President  
Nuclear Projects  
ANPP Project Director

EEVB Jr/GHD:skc

Attachment

cc: See Attached Page 2

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81-234

U. S. Nuclear Regulatory Commission  
Attention: Mr. B. H. Faulkenberry, Chief  
ANPP-19520-GHD/BSK  
November 20, 1981  
Page 2

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

J. A. Roedel  
D. B. Fasnacht  
G. C. Andognini  
F. W. Hartley  
J. M. Allen  
A. C. Rogers  
B. S. Kaplan  
W. E. Ide  
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D. R. Hawkinson  
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Ms. Patricia Lee Hourihan  
6413 South 26th Street  
Phoenix, Arizona 85040

INTERIM REPORT, REVISION 1 - DER 81-10  
POTENTIAL REPORTABLE DEFICIENCY  
ARIZONA PUBLIC SERVICE COMPANY (APS)  
PVNGS UNITS 1, 2 AND 3

I. Potential Problem

Specification 13-PM-209, Section 4.3.1.2, requires supports to be fabricated to ASME Section III, Subsection NF. ASME Section III, Subsection NF, Paragraph 4724, requires bolts tightened by means of a calibrated torque wrench shall be installed with a hardened washer under the nut or head, whichever is the element turned in tightening.

Bechtel Supplier Quality Representative noted during surveillance inspection activities that Supplier, ITT Grinnell, Warren, Ohio, was not installing hardened washers under the bolt heads on Sizes 1/4, 1/2, 1, 3 and 10 mechanical shock suppressors (Figure 306 Pivot Mount and Figure 307 Extension Assemblies). The washers installed were non-hardened, carbon steel, except on Sizes 1/4 and 1/2, Figures 306 and 307 shocks, the Supplier had installed brass washers (Reference: Drawing Numbers BH-1263, Revision M, and VH-1257, Revision G). Mechanical shock suppressors and extension assemblies affected by this deficiency have been received/installed at the jobsite.

II. Approach To and Status Of Proposed Resolution

ITT Grinnell is currently taking steps to resolve this condition by performing tests and analysis which verify that this condition will not impact the performance of these products. Also, Bechtel is assisting in preparation of Code Case and Code Inquiry documents concerning this condition. (See attached Bechtel letter dated November 10, 1981)

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

Due to the anticipated approval of the Code Case, which is to be presented to the Code Committee at its January, 1982 meeting, the Final Report and corrective action plan is forecast to be completed by February 26, 1982.

# Bechtel Group, Inc.

Fifty Beale Street  
San Francisco, California

Mail Address: P.O. Box 3965, San Francisco, CA 94119



To: F. E. Vinson  
Subject: NF-4724 Hardened Washers

Date: November 10, 1981  
From: W. R. Smith, Sr.  
Of: R&E/Codes & Standards  
At: WC-1-C37  
(415) 930-2452

Copies: J. R. Barbee  
W. H. Borter  
G. Brauer  
J. Lezenby  
M. Noesges  
T. Quan  
M. Rizkalla  
R. Tomlin

Ref: IOM, F. E. Vinson to W.R.Smith,Sr./J. R. Barbee dated 10/16/81

In the referenced IOM, it was requested that Codes and Standards submit to the Code Committee an inquiry pertaining to the use of mild steel and hardened brass washers for ASME Section III, Div. 1 construction.

Due to the expected rejection of the Code Inquiry as it applies to carbon steel washers, a proposed Code Case was also submitted. The action taken on each and the present statutes are as follows:

Code Case - (F&E81-31, NF-156, N/D81-34)

"Use of Mild Steel Washers for Section III, Div. 1 Construction"

This proposed Code Case was modified by the Working Group on Component Supports and the Subgroup on Design to read as follows:

Inquiry - For construction to ASME Section III, Division 1, what alternatives may be used in lieu of the hardened washers required by NF-4724?

Reply - It is the opinion of the Committee that for Section III, Division 1 construction, mild steel washers may be used as an alternative to the hardened washers required by NF-4724 provided that:

- 1.0 The bolts or studs are used to connect material having a specified minimum yield strength equal to or greater than 40 ksi.
- 2.0 A test per combination of materials, size and length of bolt or stud shall be performed to verify that the washer does not prevent the required preload from being developed.
- 3.0 All other applicable requirements of Section III are met.

November 10, 1981  
W. R. Smith, Sr.

4.0 This Case number shall be indicated on the documentation for this item.

The proposed Code Case was revised by the Working Group on Component Supports to only pertain to the use of mild steel washers. It was the consensus of the Working Group on Component Supports that the existing NF-4724 permits the use of hardened brass washers.

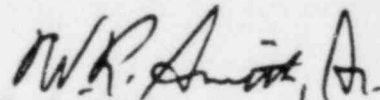
The Code Case as described above was approved by the Subcommittee on Nuclear Power (S/C III) on the condition that the Subgroup on Fabrication and Examination reviews the changes made by the SG-Design and Working Group on Component Supports.

It shall be requested that this proposed Code Case be placed on the Main Committee agenda for action at the January meeting.

Code Inquiry - The presented Code Inquiry is to be modified by Marc Bressler to pertain to harden brass washers only. The response is to permit the use of harden brass washers.

Approval of this Code Inquiry and proposed reply may not be obtained until Code Week in January.

If you have any questions, please contact W. H. Borter or J. R. Barbee at (415) 930-2452.

  
W. R. Smith, Sr.

WLB  
WRS/WHB/sla