

50-529
50-530



Arizona Nuclear Power Project

P.O. BOX 52034 • PHOENIX, ARIZONA 85072-2034

February 28, 1986
ANPP-35355-EEVB/JBK/98.05

RECEIVED
MAR - 5
PR 12: 31
REGISTRATION

U.S. Nuclear Regulatory Commission
Region V
1450 Maria Lane, Suite 210
Walnut Creek, CA 94596-5368

Attention: Mr. J. B. Martin
Regional Administrator, Region V

Subject: NRC IE Bulletin 85-01: Steam
Binding of Auxiliary Feedwater Pumps
File: 86-055-026

Dear Mr. Martin:

This letter refers to the request for action and information, as identified in the subject bulletin, that was received by ANPP on November 14, 1985. Attached please find the responses to those items directed to licensees and plants under construction.

Very truly yours,
E. E. Van Brunt, Jr.

E. E. Van Brunt, Jr.
Executive Vice President
Project Director

EEVB/JBK/rw
Attachment

cc: R. P. Zimmerman (all w/a)
E. A. Licitra
A. C. Gehr
U.S. Nuclear Regulatory Commission (original)
Document Control Desk
Washington, D.C. 20555

8603240163 860228
PDR ADOCK 05000529
Q PDR

||

IE-11

Attachment

NRC Action Item

1. Develop procedures for monitoring fluid conditions within the AFW system on a regular basis during times when the system is required to be operable. This monitoring should ensure that fluid temperature at the AFW pump discharge is maintained at about ambient temperature. Monitoring of fluid conditions, if used as the primary basis for precluding steam binding, is recommended each shift.

This item is not intended to require elaborate instrumentation. A simple means of monitoring temperature, such as touching the pipe, is a satisfactory approach.

PVNGS Response

Procedures 410P-1AF02 (1-31-86), 420P-2AF02 (2-7-86), and 430P-3AF02 (2-7-86) are revised to include fluid temperature monitoring (using temperature plate recording tape) at least once per shift at the nonsafety-related AFW pump discharge in all three units. The fluid temperatures at the other two AFW pumps are not monitored because they are not susceptible to steam binding from backleakage. The temperature reading is recorded on the operator's log sheet at least once per shift.

Because of the non-complex modifications and explicit procedural changes, in addition to training covered through watch station qualifications and the log sheet readings for the area involved, the incorporation of the procedures into the Nuclear Operator Training Program is unnecessary.

NRC Action Item

2. Develop procedures for recognizing steam binding and for restoring the AFW system to operable status, should steam binding occur.

PVNGS Response

Procedures 410P-1AF02, 420P-2AF02, and 430P-3AF02 are revised to include the identification of steam binding from increasing pipe temperature due to possible backleakage.

Operations Department Guideline 15 is revised to ensure the operator monitors fluid conditions each shift and reports any temperature increases to the control room. Moreover, the shift supervisor is responsible for reviewing the log sheet for abnormal temperature readings. If an abnormal temperature change is present, the shift supervisor will initiate an investigation to identify the root cause of the temperature increase. If it is determined the pump is steam bound, the pump will be isolated and operability restored as dictated by Technical Specifications (3/4 7-4).

Attachment (page 2)

NRC Action Item

3. Procedural controls should remain in effect until completion of hardware modification to substantially reduce the likelihood of steam binding or until superseded by action implemented as a result of resolution of Generic Issue 93.

PVNGS Response

The procedural controls aforementioned shall remain effective until completion of hardware modification to substantially reduce the likelihood of steam binding in the nonsafety-related AFW pumps. Moreover, a procedural change requires a 50.59 review to ensure the AFW system protection against steam binding is not degraded.

NRC Item

Although no specific request or requirement is intended, the following information would be helpful to the NRC in evaluating the cost of this bulletin:

1. Staff time to perform requested review and testing.
2. Staff time to prepare requested documentation.

PVNGS Response

The estimated time to complete the aforementioned tasks are summarized below.

1. Staff time to perform:
 - ° Reviews - 60 Man-hours
 - ° Testing - 2 Man-hours/week
2. Staff time to prepare requested documentation was 32 Man-hours.