Washington Public Power Supply System
P.O. Box 968 3000 George Washington Way Richland, Washington 99352 (509) 372-5000

Docket No. 50-397

August 18, 1982
G02-82-689

Mr. R. H. Engelken
U.S. Nuclear Regulatory Commission
Revion V
1450 Maria Lane, Suite 210
Walnut Creek, California 94596

Subject: NUCLEAR PROJECT NO. 2
10CFR50.55(e) REPORTABLE CONDITION #201
JOHNSON CONTROLS DESIGN ISSUE

Reference: Telecon R.T. Johnson (WPPSS) to Tony D'Angelo (USNRC Region V) Same Subject, dated July 20, 1982

In accordance with the provisions of 10CFR50.55(e), your office was notified by telephone of the above subject reportable condition on July 20, 1982. Attachment A provides the Project's interim report.

We will continue to provide your office with quarterly updates on this subject until all deficiencies are resolved. The next report will be submitted on or before November 23, 1982.

If you have any questions regarding this matter, please contact Roger T. Johnson at (509) 377-2501, extension 2712.

R G Matlock

R. G. Matlock
Program Director, WNP-2

RGM/RTJ/jdb

cc: WS Chin, BPC
RA Feil, NRC Resident Inspector, WNP-2
A Forrect, Burns and Roe HAPO
ND Lewis, NRC
J Plunkett, NUS Corporation
RE Snaith, Burns and Roe NY
V Stello, NRC
WNP-2 Files

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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

NUCLEAR PROJECT NO. 2
Docket No. 50-397
License No. CPPR-93
Johnson Controls Design Issue
INTERIM REPORT

Description of Potential Defect or Noncompliance

Burns and Roe (BRI), the Architect-Engineer, conducted a Technical Audit of Johnson Controls Incorporated (JCI) to confirm piping instrumentation design adequacy. The JCI organization performs small bore (1" and under) piping design work and installation on the WNP-2 project. JCI requires interface design information from BRI to perform their design work. The audit determined that the large bore piping thermal movement data being utilized by JCI could not be traced by BRI documentation. The information that was being utilized was also found to be discrepant. A reevaluation of the design utilizing the most current thermal movement information provided by BRI resulted in identification of six small bore pipe lines which were overstress by ASME code criteria.

Analysis of Safety Implication

Based on the most conservative assumption that the overstressed condition would have led to simultaneous multiple small bore piping failures, there would have been a loss of various instrumentation. The most significant instrumentation loss would have been the automatic main steam line isolation and feedwater control on steam line "D". Other control functions would also be affected having varying safety and operational implications. Therefore, the condition is considered to be reportable.

Corrective Actions Taken

BRI has issued current thermal displacement data to JCI and is updating that information to be current with the latest large bore piping analysis. JCI is now reevaluating their small bore design based on the most current information. JCI has issued corrective action on the six lines which were overstressed.

Line 37F -	Rerouted Piping
39e -	Replaced hanger with snubber type support
42a -	Revised support from two-way to three-way
69a -	Revised support from two-way to three-way
70e -	Revised support from two-way to three-way
75e -	Rerouted Piping

Field revisions are expected to be completed prior to the end of August 1982.