



Burns and Roe, Inc.

185 Crossways Park Drive ■ Woodbury, New York 11797 ■ Telephone (516) 677-4000

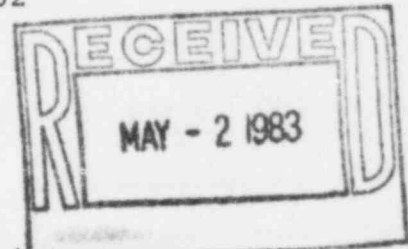
TWX 510-221-2195 ■ Cable BURNS ROE WDBY

Subject: Work Order 3900/4000
Washington Public Power Supply System
WNP-2
Potential Reportable Deficiency
Section Modulus Error in ADLPIPE

Main Office
550 Kinderkamack Road
Oradell, New Jersey 07649
(201) 265-2000

April 26, 1983
BRGO-83-002

U. S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011



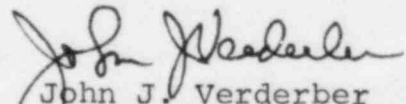
Attention: Mr. J. P. Collins, Regional Administrator

Reference: BRGO-83-001, dated January 28, 1983,
same subject

Gentlemen:

In the reference, Burns and Roe, Inc. reported to you the discovery of a Section Modulus Error in ADLPIPE, which we considered a potential deviation under 10CFR21 and possibly a generic industry issue. The Engineering Study (copy attached) performed to evaluate the reportability of the ADLPIPE error has been completed, which concludes that the error did not affect the adequacy of any safety-related nuclear power plant piping system designed by Burns and Roe, Inc. Therefore, the potential deviation has been dispositioned Not Reportable under 10CFR21.

Very truly yours,


John J. Verderber
Project Engineering
Manager

JJV/JMB/bl
Attachment
cc: R. T. Johnson - WPPSS - 1 w/1

Director, Office of Inspection and Enforcement - 1 w/3
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

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DEFECT AND NONCOMPLIANCE EVALUATION REPORT

WNP-2-ED-003

BURNS AND ROE, INC.

(Address) Woodbury, New York

Project WNP-2

Evaluation Report # 83-01

Work Order 3900

Date 1/17/83

Specific Area of Concern Section Modulus Error in ADLPIPE

Outside Contractor Involved (if any) None

1. Description of Potential Defect or Noncompliance: There is an error in ADLPIPE, a pipe stress analysis program, where the section modulus is used for stresses in reduced branch outlets. In calculating the bending stresses for the reduced size branch, the ADLPIPE uses the pipe run section modulus for the reduced branch. This error applies only when the "YEAR" parameter (columns 31-40) is input as "1972" on the ADLPIPE "Class" card for ASME III, Class 2 and 3 analysis.

2. Date and Method of Discovery: Memo from T. Butler (Burns and Roe) to O. Michejda (Burns and Roe) dated 12/2/82, which identified the error to Burns and Roe Stress Department.

3. Analysis of Safety Implication: The calculated stresses in the branch connection may not be conservative and, therefore, some tees or branches may be overstressed. Burns and Roe, therefore, initiated a program to review all ASME, Section III, Class 2 pipe systems which have used the 1972 version of ADLPIPE for stress calculations.

4. Corrective Action:

5. Required Review and Individual Determination:

	Signature/ Date	Reportable	Not Reportable	Engineering Study Req'd
og. Engineering Manager	<i>[Signature]</i>			✓
roject QA Group Supv.	<i>[Signature]</i>			✓
og. Group Supervisor	<i>[Signature]</i>			✓
icensing Supervisor	<i>[Signature]</i>			✓
itiating Employee	<i>[Signature]</i>			✓

Evaluation by Vice President of Engineering and Design: (if Req'd)
a. ☒ Further Review Req'd: Engineering Study to be completed by: Feb 15, 1983

Determination of reportability to be made after evaluation: Possibly
☒ NRC to be informed of a Potential Deviation - Generic issue
☐ Not currently considered a Potential Deviation

ER Hummel
Signature

1/25/83
Date
Pheanne Clark
Signature

DESIGNATED ORIGINAL

1/17/83

Evaluation Report # 83-01

NRC Notified by A. J. Lag-vaen Date Jan 28-83 Time 11 AM

b. Defect or Noncompliance is :

☒ ^{Not} Reportable

☐ Reportable

Check as
Appropriate

☐ 10CFR21

☐ Potential 10CFR50,55(e)

c. Other Facilities ~~which may be affected~~ ^{examined and found unaffected insofar as}

~~Comments~~ Band R work were: Cooper Station; Oyster Creek; TMI #2; Philippines;

PSEG Salem #1 & #2; CRBRP

ER Kummel

Signature

4/8/83

Date

1:30 PM

Time

7. Action to be Taken

Licensing Supervisor Signature

Date

Time