



Burns and Roe, Inc.

601 Williams Blvd. ■ Richland, Washington 99352 ■ Tel. (509) 943-8200

Subject: Work Order 3900-4000  
Washington Public Power Supply System  
WNP-2  
Room Pressurization Due To High  
Energy Line Break  
Responds to: NA

September 29, 1983  
BRGO-RO-83-013  
Response Required: NA

Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Director

Dear Sir:

This letter is to report to you a condition we have deemed potentially reportable under 10CFR21. This subject was discussed with R. Dodds of your Region V on September 28, 1983. We are unable to determine reportability pending further engineering study.

The concern is that plant modifications implemented for fire protection and other concerns included blocking of some vent paths from Reactor Building Rooms containing high energy lines. Room pressurization calculations were not updated to reflect the revised venting capability.

Decreased vent area results in higher room pressure following a High Energy Line Break (HELB) which could cause wall/floor failure with attendant damage to related components. Complete details are contained in the attached preliminary evaluation.

If you have further questions, please contact W.G. Conn at (509) 943-8241.

WGC:MCD:lvs

Attachment

cc: BPA - Mr. W.S. Chin  
SS - Mr. B.A. Holmberg, w/a  
SS - Mr. L.T. Harrold, w/a  
SS - Mr. J.G. Tellefson, w/a  
SS - Mr. R.T. Johnson, w/a  
NRC - Mr. J.B. Martin, w/a

Region V

Very truly yours,

W.G. Conn  
Senior Group Supervisor

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ROOM PRESSURIZATION DUE TO  
HIGH ENERGY LINE BREAKS #83-15

DESCRIPTION OF DEFICIENCY

Plant modifications implemented for fire protection and other concerns included blocking of some vent paths from Reactor Building Rooms containing high energy lines. Room pressurization calculations were not updated to reflect the revised venting capability.

SAFETY IMPLICATION

Decreased vent area results in higher room pressure following a High Energy Line Break (HELB) which could cause wall/floor failure with attendant damage to safety related components.

CAUSE OF DEFICIENCY

Failure to recognize that reducing room vent paths could have adverse safety implications.

ACTIONS TO PREVENT RECURRENCE

Group Supervisors will be advised that changes to room vent areas require consideration as to potential effect on room pressurization calculations.

CORRECTIVE ACTION

All Reactor Building Rooms containing high energy lines were evaluated as to vent area changes. Six rooms were determined to require reanalysis. This activity is currently in process. Resulting room pressures will be evaluated to determine effect on walls/floors.