

Washington Public Power Supply System

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September 4, 1981
G03-81-2452

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NRC

Nuclear Regulatory Commission, Region V
Suite 202, Walnut Creek Plaza
1990 North California Boulevard
Walnut Creek, California 94596

Attention: Mr. B. H. Faulkenberry
Chief, Reactor Construction Projects Branch

Gentlemen:

Subject: PROJECT NOS. 3 AND 5
DOCKET NUMBERS 50-508 AND 50-509
INTERIM REPORT OF POTENTIAL 50.55(e)
UNDERSIZE STRUCTURAL STEEL COLUMN
FURNISHED AND INSTALLED



Reference: Record of Telecon J. A. Puzauskas to
D. Haist, dated August 7, 1981.

Attached please find an interim report of a potential 10CFR50.55(e) concerning an undersize structural steel column in Unit 3. A final report will be provided by January 15, 1982.

Should you have any questions or desire further information, please contact me directly.

Very truly yours,

R. S. Leddick
Program Director, WNP-3/5

cc: J. Adams - PP&L
D. Smithpeter - EPA
Ebasco - New York
WNP-3/5 Files - Richland

IR27
S1/1

WASHINGTON PUBLIC POWER SUPPLY SYSTEM
WPPSS NUCLEAR PROJECTS NO. 3 & 5
UNDERSIZE COLUMN INTERIM REPORT

Introduction:

During the course of building steel erection in WNP-3 Reactor Auxiliary Building, the installation contractor determined that a column located at column lines P4Z, elevation 390.00 to 417.50 feet had a dimensional discrepancy. Subsequent engineering investigation revealed that the column was undersized, that is, a W14x233 column was supplied versus a W14x257 column per the design drawings. The column was supplied by Isaacson Steel Company, Seattle, Washington.

An NCR was initiated to document the deficiency. The NRC was notified of the deficiency on August 7, 1981 in accordance with the provisions of 10CFR50.55(e).

A. POTENTIAL PROBLEMS AND REFERENCES TO THE NOTIFICATION

1. The installed column will have approximately 10% lower load capabilities than the column selected in the design. Engineering evaluation is needed to ensure design integrity.
2. Since the vendor has supplied numerous structural items, it must be confirmed that this is a single occurrence.

B. APPROACH TO THE RESOLUTION OF THE PROBLEM

The Engineer's NCR outlines the approach to the problem as follows:

1. Perform design evaluation of the column and determine actions needed to ensure design integrity.
2. Redesign of the connection at the top to allow beam connections to be made to the existing column.
3. Check all columns and major beam shapes in both Unit 3 and 5.
4. Require the vendor to perform investigation as to cause of error.

C. STATUS OF PROPOSED RESOLUTION

Engineering has evaluated the column design and proposed the following repair:

1. Reinforce column web from E1. 390' to E1. 417.50' with a 1" thick plate. This will be performed at a later date.
2. Modify column splice connection above E1. 417.50' with shims. This activity has been completed.

Resident Engineering is evaluating all exposed major columns and beams for design compliance.

Isaacson Steel has completed a preliminary investigation. According to the summary of this investigation, the column member identified in the Engineer's NCR was ordered correctly from Bethlehem Steel and Bethlehem apparently supplied W14x233 instead of W14x257.

D. REASON WHY THE FINAL REPORT WILL BE DELAYED

Isaacson Steel has not completed its investigation. The final report will be issued upon completion of Isaacson's investigation.

E. PROJECTED COMPLETION OF CORRECTIVE ACTION AND SUBMITTAL DATE OF FINAL REPORT

A final report will be submitted January 15, 1982.