

**Washington Public Power Supply System**

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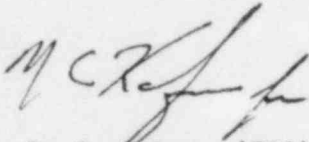
U. S. Nuclear Regulatory Commission, Region V  
Office of Inspection and Enforcement  
1450 Maria Lane, Suite 260  
Walnut Creek, California 94596-5368

Attention: Mr. D. M. Sternberg, Chief  
Reactor Projects Branch No. 1

Subject: POTENTIAL 10CFR50.55(e) DEFICIENCY  
NONCONFORMING WELD REPAIR OF  
BEAM COPE BURN CUTS  
(D/N NO. 49)

On June 24, 1983 the Supply System notified your office of a potential 10CFR50.55(e) Deficiency concerning the subject condition. An investigation is in progress and insufficient data exists to determine the safety significance at this time. Attached is a Supply System approved Interim Report that describes the problem and provides a proposed resolution.

It is anticipated that a final report will be provided to your office by February 15, 1984. Should you have any questions or desire further information, please contact me directly.



D. E. Dobson (760)  
Acting Program Director, WNP-3/5

JAV:nj

Attachments

cc: J. Adams - NESCO  
D. Smithpeter - BPA  
Ebasco - New York  
WNP-3 Files - Richland  
R. D. Hill - Puget Sound Power & Light Company  
P. Inman - Washington Water Power Company  
B. D. Withers - Portland General Electric Company  
L. D. Weislogel - Pacific Power & Light Company

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WASHINGTON NUCLEAR PROJECT NO. 3  
(DOCKET NO. 50-508)

POTENTIAL 10CFR50.55(e) DEFICIENCY  
INTERIM REPORT

NONCONFORMING WELD REPAIR OF BEAM  
COPE BURN CUTS (D/N NO. 49)

Description of Deficiency

A potential problem in weld repair of burn cuts which were formed during the coping of rolled beams used for floor framing in the Reactor Building was identified. This steel was supplied by Chicago Bridge and Iron under Contract WPPS-3240-113. The burn cuts were covered by a seal pass weld instead of a full penetration weld repair as required by CB&I procedure. The deficiency in repair may result in failure of the beams to function as designed.

Corrective Actions

The following actions have been/are being taken to resolve the problem:

- 1) CB&I has undertaken an in-house investigation to determine the cause and extent of the subject burn cuts and nonconforming repair weld problem. CB&I has compiled a list of all the beams fabricated under Contract WPPS-3240-113 and categorized these beams by the methods and shop location of the fabrication. CB&I also started radiographing copes of installed beams inside the Reactor Building to identify the extent to which the deficient beams have been installed.

To facilitate an evaluation and a disposition seven categories were established as follows:

Category 1: Void (this category not being used)

Category 2: Copes prepared by hand burning

Category 3: Copes examined and repaired by CB&I

Category 4: Copes of beams which have bent plate clips extending beyond the cope

Category 5: Cope depth greater than the burn cut

Category 6: All copes which are not covered by Categories 2 through 5 and 7

Category 7: Copes of those beams which were fabricated by Mark Steel Corporation

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NONCONFORMING WELD REPAIR OF BEAM COPE BURN CUTS (D/N NO. 49)  
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- 2) The status of the investigations on the seven categories are as follows:

Category 1: Items previously included in Category 1 have been distributed to other six categories and this category is voided.

Category 2: Copes in this category were prepared by hand burning. It has been determined by CB&I that the burn cuts are not formed in the hand burning process.

Category 3: Items have been repaired.

Category 4: Items are in the process of being evaluated through design analysis.

Category 5: Inventory of Category 5 items is not complete at this time. CB&I has submitted test results to substantiate the "use as is" disposition for this category. The results of these tests are being evaluated by the Engineer.

Category 6: Investigation of Category 6 items is in progress. CB&I is radiographing all the copes in this category. As of July 12, 1983 a total of 134 beams consisting of approximately 236 copes have been examined. One hundred and thirteen (113) of these beams have been installed. Forty-nine (49) copes in 28 beams, out of 134 beams examined, were found to have potentially nonconforming weld repairs.

Category 7: CB&I audited Mark Steel procedures and methods of fabrication and concluded that the burn cuts were not problems in the process of fabrication which was followed by Mark Steel. CB&I issued a letter to this effect. The Engineer is evaluating CB&I's disposition of these items along with the information which supports these conclusions.

- 3) CB&I is actively pursuing the in-house investigation to pinpoint the cause of the problem, through extensive personnel interviews, fabrication documentation verifications and in-house quality assurance program reviews.

Reason Why The Final Report Will Be Delayed

CB&I's investigation is not complete at this time. Until all the data and reports are forwarded, an engineering evaluation and analysis cannot be completed. It is anticipated that a final report will be provided by February 15, 1984.