

Mr. E. P. Rahe, Jr., Manager
Nuclear Safety Department
Westinghouse Electric Corporation
P. O. Box 355
Pittsburgh, Pennsylvania 15230

SEP 6 1984

Dear Mr. Rahe:

IE Information Notice 84-55 was recently issued as a result of reactor coolant leaks from incore probe seal tables. These leaks occurred due to the failure of Swagelok fittings during maintenance activities. In response to the information notice Crawford Fitting Company, the supplier of Swagelok fittings, sent the enclosed letter to the NRC. According to Crawford, the fittings may not have been properly used in the applications where the failures occurred.

We understand that application of these fittings is a Westinghouse design utilizing a commercial grade fitting. Please confirm or correct this understanding. If correct, please describe the method that was used to qualify these fittings in accordance with ASME Code provisions for pressure boundary components. In order to facilitate NRC resolution of the generic aspects of this matter, we request a response within 30 days of the date of this letter.

Sincerely,

Original Signed By:
E. L. Jordan

Edward L. Jordan, Director
Division of Emergency Preparedness
and Engineering Response
Office of Inspection and Enforcement

Enclosure: Letter Crawford Fitting Co.
to E. L. Jordan dated 8/13/84

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PDR

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Westinghouse Electric Corporation
P. O. Box 355
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Transmittal Form
And sub. info.
W00128.1

D: DEPER: IE
ELJordan
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Mr. E. P. Rahe, Jr., Manager
Nuclear Safety Department
Westinghouse Electric Corporation
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Dear Mr. Rahe:

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ROUTING AND TRANSMITTAL SLIP

Date

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Richard W. Starostecki, Reg I		
2. Richard C. Lewis, Reg. II		
3. Dave Verrelli, Reg. II		
4. R. L. Spassard, Reg. III		
5. Richard P. Denise, Reg. IV		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

6. Thomas W. Bishop, Reg V

Attached is a letter from Crawford Fitting Company concerning use of Swagelok Fittings at incore probe seal tables at Westinghouse plants. The Regions are being told about this letter today both by phone and the Daily Report

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

Room No.—Bldg.

Ernie Ross, IE

Phone No.

492-4944

5041-102

OPTIONAL FORM 41 (Rev. 7-76)

Prescribed by GSA
FPMR (41 CFR) 101-11.206

Division of Emergency Preparedness and Engineering Response

Potential Part 21 Report. Crawford Fitting Company has informed the NRC by letter dated August 13, 1984, that the Swagelok Tube Fittings used with incore probe seal tables at Westinghouse plants are not being used according to any of their instructions. The uses of the fittings are not uses of the fittings as designed. The problems described by Crawford involve both the design of the incore probe seals and maintenance. The reported problems are being evaluated by the Office of Inspection and Enforcement.

Handwritten initials/signature

Swagelok

CRAWFORD FITTING COMPANY
SOLOM, OHIO 44139

FRED A. LENNON
CHAIRMAN

August 13, 1984

Mr. Edward L. Jordan, Director
Division of Emergency Preparedness
and Engineering Response
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D.C. 20555

Re: IE Information Notice 84-55
Seal Table Leaks at PWR's - July 6, 1984

Gentlemen:

We recently received a copy of the above notice regarding fitting leaks at incore probe seal tables.

Since Swagelok Tube Fittings were mentioned by name, we would like to point out that the Swagelok Fittings in question were not being used according to any of our instructions.

1. It is our understanding that the 5/8" O.D. tubing is actually not 5/8" O.D. annealed tubing, but is turned down from very heavy wall pipe to approximately 5/8" O.D. Our fittings are designed for use on fully annealed hydraulic quality stainless steel tubing with a suggested maximum Rockwell hardness of Rb80, and an absolute maximum allowable hardness of Rb90, as required by ASTM A213, A249 and A269. The 5/16" O.D. thimble tube, we are told, is upset from original .300"-.305" diameter tubing to 5/16" O.D. This process would normally work-harden the tubing, possibly to hardness beyond that for which our fittings are designed.
2. During maintenance several washers or spacers are placed at the end of the tube. Ferrules have been actually jacked from their sealing groove by tightening the fitting while the washers are in place.
3. Metal ferrules have been cut-off the tubing and replaced with new ferrules at the same location on the tube, a completely unacceptable practice.

In the case of the Sequoyah incident we have been told that a ferrule of another manufacturer had been interchanged with a Swagelok ferrule in the failed fitting but we have been unable to confirm this.

Handwritten number: 84-0824-313
Handwritten initials: PDR

CRAWFORD FITTING COMPANY

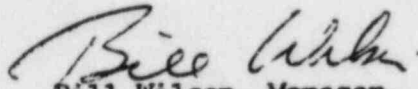
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Mr. Edward L. Jordan, Director

3/15/84

All the above uses of our fittings are not uses of the fitting as designed. Our long-time successful use in nuclear applications is impugned if we do not advise you of these facts.

Sincerely,



Bill Wilson, Manager
Marketing & Technical
Services

rdk

cc: Washington V & F
Pittsburgh V & F