



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 1000
ARLINGTON, TEXAS 76012

bcc to DAC:ADM:
CENTRAL FILES
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April 21, 1980

STATE

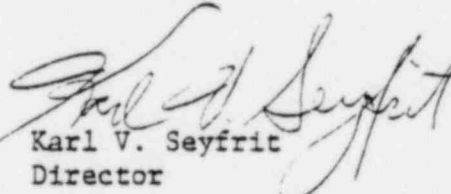
Docket No. 50-267

Public Service Company of Colorado
ATTN: Mr. C. K. Millen
Senior Vice President
P. O. Box 840
Denver, Colorado 80201

Gentlemen:

This IE Information Notice is provided as an early notification of a possibly significant matter. It is expected that recipients will review the information for possible applicability to their facilities. No specific action or response is requested at this time. If further NRC evaluations so indicate, an IE Circular or Bulletin will be issued to recommend or request specific licensee actions. If you have questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

Sincerely,


Karl V. Seyfrit
Director

Enclosures:

1. IE Information Notice
No. 80-15
2. List of Recently Issued
IE Information Notices

cc: D. W. Warembourg, Nuclear Production
Manager
Fort St. Vrain Nuclear Station
P. O. Box 368
Platteville, Colorado 80651

L. Brey, Manager, Quality Assurance

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Accession No.
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

IE Information Notice No. 80-15
Date: April 21, 1980
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AXIALLY (LONGITUDINAL) ORIENTED CRACKING IN PIPING

On March 8, 1980, the Commonwealth Edison Company reported to the NRC that slight leakage was observed from the "A" loop core spray injection piping during a reactor coolant system leakage test at their Quad-Cities Unit 2 Nuclear Power Station. The source of leakage was subsequently identified to be located adjacent to a shop weld joining a 90° elbow and a wedge section of elbow material used to extend the elbow to 105°. Subsequent ultrasonic inspections revealed additional cracking in several other elbows in "A" and "B" core spray loops. The cracks are located adjacent to welds and oriented transverse to the weld in the axial (longitudinal) piping direction. The affected elbows have been removed, and failure analyses are in progress. Preliminary results from liquid penetrant examinations of the elbow interior surface in the counter bore/weld root area revealed axially oriented cracks on both sides of the weld in the counter bores adjacent to the weld roots. From the limited metallography performed to date, the cracking mode appears to be intergranular stress corrosion cracking. The cracking, however, only appears to be slightly branched. A determination as to whether or not the cracking extends into and across the welds cannot be made at this time.

It is significant to point out that these service sensitive lines, as defined by NUREG 313, had been examined on an augmented basis per NUREG 313 requirements. Two of the affected welds were inspected ultrasonically during the current outage, prior to the leakage being observed at the pressure test, with no indication of cracking reported. Further ultrasonic examinations, using standard ASME Section XI methods, performed after discovery of the leak clearly revealed the cracking (approximately 100% over the reference level).

Licensees are requested to inform NDE inspection personnel of the above stated information and to emphasize the need for care when performing circumferential UT scans of the weld and adjacent areas in piping components. Particular importance should be stressed when the examinations are performed on BWR service sensitive 304 stainless steel piping and on PWR 304 stainless steel piping in stagnant systems.

This Information Notice is provided as an early notification of a possibly significant matter that is still under review by the NRC staff. It is expected that recipients will review the information for possible applicability to their facility. No specific action or response is requested at this time. If you have any questions regarding this matter, please contact the Director of the appropriate NRC Regional Office.

IE Information Notice No. 80-15
April 21, 1980

LISTING OF RECENTLY ISSUED
IE INFORMATION NOTICES

| Information Notice No. | Subject | Date Issued | Issued To |
|------------------------|--|-------------|---|
| 80-10 | Partial Loss of Non-Nuclear Instrument System Power Supply During Operation | 3/7/80 | All Power reactor facilities holding Operating Licenses (OLs) and Construction Permits (CPs) |
| 80-11 | General Problems with ASCO Valves in Nuclear Application Including Fire Protection Systems | 3/14/80 | All holders of Reactor Operating License (OL), Construction Permit (CP), fuel fabrication and processing facilities |
| 80-12 | Instrument Failure Causes Opening of PORV and Block Valve | 3/31/80 | All holders of Power Reactor Operating Licenses (OLs) and Construction Permits (CPs) |
| 80-13 | General Electric Type SBM Control Switches - Defective Cam Followers | 4/2/80 | All light water reactor facilities holding power reactor Operating Licenses (OLs) and Construction Permits (CPs) |
| 80-14 | Safety Suggestions From Employees | 4/2/80 | All power reactor facilities with an Operating License (OL) or Construction Permit (CP) |

Enclosure