



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137
June 25, 1979

TIC

Docket No. 50-546
Docket No. 50-547

Public Service of Indiana
ATTN: Dr. James Couglin
Vice President, Nuclear
1000 East Main Street
Plainfield, IN 46168

Gentlemen:

The enclosed IE Bulletin No. 79-13 is forwarded to you for information. No written response is required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

James G. Keppler
James G. Keppler
Director

Enclosures:

1. IE Bulletin No. 79-13
2. Listing of IE Bulletins Issued
in Last 12 Months

cc w/encls:

Mr. R. M. Brown, Construction
Project Superintendent
Central Files
Director, NRR/DPM
Director, NRR/DOR
PDR
Local PDR
NSIC
TIC
LeBoeuf, Lamb, Leiby & MacRae

369 050

12
7907130147

Q

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

June 25, 1979

IE Bulletin No. 79-13

CRACKING IN FEEDWATER SYSTEM PIPING

Description of Circumstances:

On May 20, 1979, Indiana and Michigan Power Company notified the NRC of cracking in two feedwater lines at their D. C. Cook Unit 2 facility. The cracking was discovered following a shutdown on May 19 to investigate leakage inside containment. Leaking circumferential cracks were identified in the 16-inch feedwater elbows adjacent to two steam generator nozzle elbow welds. Subsequent radiographic examination revealed crack indications in all eight steam generator feedwater lines at this location on both Units 1 and 2.

On May 25, 1979, a letter was sent to all PWR licensees by the Office of Nuclear Reactor Regulation which informed licensees of the D. C. Cook failures and requested specific information on feedwater system design, fabrication, inspection and operating histories. To further explore the generic nature of the cracking problem, the Office of Inspection and Enforcement requested licensees of PWR plants in current outages to immediately conduct volumetric examination of certain feedwater piping welds.

As a result of these actions, several other licensees with Westinghouse steam generators reported crack indications. Southern California Edison reported on June 5, 1979, that radiographic examination revealed indications of cracking in feedwater nozzle-to-piping welds on two of three steam generators of San Onofre Unit 1. On June 15, 1979, Carolina Power and Light reported that radiography showed crack indications in similar locations at their H. B. Robinson Unit 2. Duquesne Power and Light confirmed on June 18, 1979, that radiography has shown cracking in their Beaver Valley Unit 1 feedwater piping to vessel nozzle weld. Public Service Electric and Gas Company reported on June 20, 1979 that Salem Unit 1 also has crack indications. Wisconsin Public Service company decided on June 20, 1979 to cut out a feedwater nozzle-to-pipe weld which contained questionable indication, for metallurgical examination. As of June 22, 1979 and since May 25, 1979 seven other PWR facilities have inspected the feedwater nozzle-to-pipe welds without finding cracking indications.

The feedwater nozzle-to-pipe configurations for D.C. Cook and for San Onofre are shown on the attached figures 1 and 2. A typical feedwater pipe-to-nozzle weld joint detail showing the principal crack locations for D.C. Cook and San Onofre are shown on the attached figure 3.

On March 17, 1977, during heat-up for hot fuel Unit 1, a leak was discovered in the vessel to the 16-inch diameter feedwater piping to steam generator. A nondestructive examination of all nozzle welds

DUPLICATE DOCUMENT

Entire document previously entered
into system under:

IN. 1 7906250348

No. of pages: 10

369 051