U.S. NUCLEAR REQULATORY COMMISSIO APPROVED OME NO 3150-0104 AXPIRES 8/31/85 LICENSEE EVENT REPORT (LER) DOCKET NUMBER (2) OFIO Monticello 0 15 10 10 10 12 16 3 Crack Indications on Primary System Pressure Boundary Piping EVENT DATE (6) OTHER FACILITIES INVOLVED IS REPORT DATE (7) SEGUENTIAL FACILITY NAMES DOCKET NUMBERIS MONTH DAY YEAR YEAR 0 15 10 10 10 1 0 1510 10 101 011 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR & (Check one or more of the following) (11) 73 71161 60 73(a)(2)(ly) 20.405(4)(1)(1) 50.73(a)(2)(v) 72.79 (e) 50.36(e)(1) OTHER (Specify in Abstract below and in Taxt, NRC Form 386A) 20.49(4)(1)(81 50.36(c)(2) 60.73(a)(2)(vii) 50.73(e)(2)(vui)(A) 20.406(0)(1)/00 80 73(a)(2)(i) 20.406(a)(1)(lv) 80.73(a)(2)(R) 80.73(a)(2)(vtH)(B) 20,406(a)(1)(v) 90.73(a)(2)1(6) 50.73(a)(2)(x) LICENSEE CONTACT FOR THIS LER (12) ELEPHONE NUMBER NAME Michael Keller, Production Engineer 9 1,2 COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT [13] TO NERDS MANUFAC-MANUFAC-TURER TO NERDS CAURE GYSTEM COMPONENT COMPONENT CAUSE SYSTEM G 1018 10 SUPPLEMENTAL REPORT EXPECTED (14) DAY YEAR EXPECTED SUBMISSION DATE (15) YES (If yes, complete EXPECTED SUBMISSION DATE) NO

Crack indications have been found in the following locations:

- Recirculation System Sensing Line Penetration Piping (previously reported in LER 84-011-00).
- Residual Heat Removal System (previously reported in LER 84-011-00).
- 3. Recirculation System Pump Suction and Discharge Valves.
- 4. Recirculation System Discharge Riser "D" Safe End.

The degraded piping will be replaced with IGSCC resistant material. The valve material with indications will be machined so as to remove all affected material.

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| NAC | Form 386A | U.E. NUCLEAR REGULATORY COMMISSION | 15-821 | U.E. NUCLEAR REGULATORY COMMISSION | APPROVED OMB NO. 3150-0104 | EXPIRES. 8/31/85 | EXPIRES. 8/31/85 | EXPIRES. 8/31/85 | YEAR | SEQUENTIAL | PROVISION | NUMBER | NUMBER

On February 18, 1984 and February 23, 1984 crack indications were detected on the B Loop Jet Pump (P) Instrument Seal (SEAL) and on both A&B Loops of the Residual Heat Removal (RHR) Low Pressure Coolant Injection (LPCI) lines. On April 13 and 14, 1984, crack indications were detected on the A Loop Recirculation Pump Discharge Valve (V) and the B Loop Recirculation Pump Suction and Discharge Valves. On May 5, 1984 crack indications were detected on the B Loop Recirculation System Discharge Riser D Safe End (PSF). All crack indications have been detected during normal Non-Destructive Examination activities for replacement of Recirculation System Piping (PSP). All cracks described above were detected while in cold shutdown.

All crack indications were located within the heat affected zone of welds to 304 Stainless Steel. B Loop Jet Pump Instrument Seal crack indications were located within the heat affected zone of a weld between two 304 Stainless Steel eccentric reducers. Indications appear to have been on the inside surface oriented parallel to the pipe axis. Crack indications on the A&B Loops of the RHR LPCI lines were located on the reactor side of the stainless steel LPCI testable check valves AO 10-46 A/B in the heat affected zone of welds joining a stainless steel pup piece to the valve and carbon steel piping. Indications on the Recirc Valves were located within the heat affected zone of welds to 304 Stainless Steel pipe. Indications on the Riser D Safe End were located within the heat affected zone of the 304 Stainless Steel Safe End to Vessel Nozzle Weld.

All detected crack indications are attributed to Intergranular Stress Corrosion Cracking (IGSCC). All susceptible 304 Stainless Steel is to be replaced with IGSCC resistant material. Welds to the valves and safe ends will be post weld heat treated using Induction Heating Stress Improvement techniques.

There have been two previous similar occurrences:

M-RO-82-13 Recirc System IGSCC Problems
AO-75-03 Recirc Pump Bypass Line IGSCC Problems

With the exception of one Thru-Wall crack on the Discharge Riser & Safe End, all indications have been found to be surface defects. There were no radioactive materials released and no personnel exposures or injuries took place. There was no effect upon public health or safety.

HHH095





Northern States Power Company

414 Nicollet Mall Minneapolis, Minnesota 55401 Telephone (612) 330-5500

May 15, 1984

U S Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

> MONTICELLO NUCLEAR GENERATING PLANT Docket No. 50-263 License No. DPR-22

Revised Licensee Event Report Related to Crack Indications on Primary System Pressure Boundary

A revised Licensee Event Report for this occurrence is attached.

These events were reported via the Emergency Notification System per 10 CFR Part 72 on February 18, February 23, April 13, April 14, and May 7, 1984.

David Musolf

Manager - Nuclear Support Services

cc: Regional Administrator - III, NRC

NRR Project Manager, NRC Resident Inspector, NRC

MPCA

Attn: J W Ferman

Attachment

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